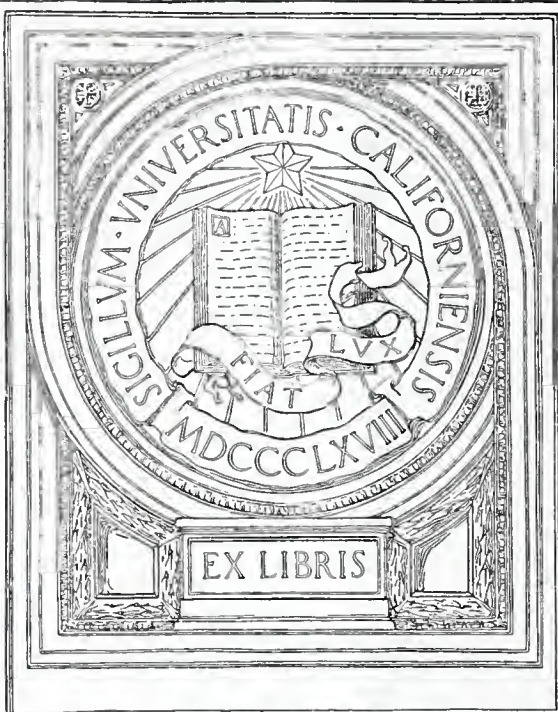



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OF THE

ARKANSAS MEDICAL SOCIETY, 1939

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President, Arkansas Medical Society
1939-1940

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No. 1

ANNUAL ADDRESS*

S. J. WOLFERMANN, M. D.,
Fort Smith

By custom and precedent the opening of the general session of this Society calls for a talk by the presiding officer. The subject has usually been one of current importance. The outstanding topic of the year has been socialized medicine and we will have the good fortune to have that presented to us by a man who knows more about it than anyone else in the world. Consequently I shall not touch upon it at all.

This year I have visited over twenty-five county and district societies. From these contacts I have learned some things about organized medicine in Arkansas, and a few of them I should like to present at this time.

I thought you might be interested in these few statistics: In 1930 the last available figures, 20% of Arkansas population was urban, and 79% rural. If then 4/5 of our population is rural we as a society should be most concerned with medical economic problems concerning our greater percentage of people, namely, the rural people. We have only three cities in the state between 25,000 and 100,000.

	Number of Places	Population
25,000 to 100,000	3	123,872
10,000 to 25,000	6	97,261
5,000 to 10,000	9	56,416
2,500 to 5,000	31	105,329
1,000 to 2,500	58	89,513
Under 1,000	282	106,577

This again shows that we should be most concerned economically with cities of two classes, 282 under 1,000 with a total population of 106,577 and 31 cities between 2,500 to 5,000 with a population of 105,329.

This brings definitely to us just one thing: Whatever is done to improve the economic situation in medicine, if it is to help Arkansas in a

large way, it must contain some plan to reach the rural districts and the people in cities under 5,000 and really in villages under 1,000.

It was interesting and gratifying in my visits this year to find some very small but intensely active county medical societies, and conversely in one county where there were enough men to form a moderately large society, they met only once a year to elect officers, and practically accomplished nothing. To carry on, a county unit must be an active going affair, meeting at least once a month, probably omitting July and August due to intense heat. There must be a minimum scientific program to hold the interest of the members.

I found a growing and increasing tendency over the state to have what we call "foreign programs." The secretary of a county society would write one of the larger cities to please send a program for such and such a date, and on that date out of one of the larger county societies would go two to four men and give that county a good program.

Now I think that is an excellent idea if not overdone. Primarily the county society is a place to develop local members and I firmly believe 70% of meetings should be put on by local members, using so-called outside programs not over 30%. Every man in active practice, no matter how small his community, has interesting cases, and case reports by him, discussed by his own colleagues, are most valuable. It helps to broaden him and his associates scientifically, and nothing promotes better fellowship among competitors than frank and open case discussions at a medical society meeting. You will learn to know your competitors better in this way, and I firmly believe the adage that "To know a man is to love him."

Case reports, round table discussions and symposiums divided among local men will keep you on your toes and help you do better work.

The isolated physician, due to the daily grind, becomes irritable, sensitive, jealous, and at times

*Read before the General Session, 64th Annual meeting, Arkansas Medical Society, Hot Springs National Park, May 8, 1939.

gets ideas of persecution. Nothing combats this like frequent contacts with ones colleagues, and no place can this be done so well as in the county medical society.

Some societies I visited had paid no attention to the survey, but in those counties that had an active economic committee, things were better. Some few counties had committees who were talking to civic clubs, parent-teacher associations and the like, educating the laity in regard to socialized medicine. In those communities lay people were not in favor of an economic medical change, and I would like to strongly urge you all to see that this next year your county medical society has an active public relations and economic committee.

It was interesting in going to various counties to see the relations between the practicing physicians and the health units. It was indeed gratifying to only rarely hear of the least bit of friction, which shows that the majority of the Arkansas Medical Society, as well as the majority of the local health officers and health nurses, realize that the State Board of Health and its small divisions, the county health units, are the babies of the medical profession and there must be only the closest cooperation between these two.

On one interesting visit I was asked by a member of a county medical society, "How much of your dues goes to the A. M. A. to pay for this fight on socialized medicine." Of course as most of you know, the answer is "Nothing." The A. M. A. gets no money from your dues to your county or state medical society. If you are a fellow of the A. M. A., to which as a member of the Arkansas Medical Society you are eligible, upon payment of Fellowship dues you will then receive the A. M. A. Journal and will help finance the fight A. M. A. is making.

I have one most sincere request to make this year.

Our necrology list each year is astounding. Medical men wear out, die rather early in life and too many very suddenly. We have preached annual health programs to the laity, and the insurance companies have definitely shown that such examinations pay in life extended and in dollars and cents. This year I would like to see each county society outline some program whereby each doctor in the society gets a health examination by one of his colleagues. Let us

establish annual health examinations for the doctor, as well as the laity.

Finally, as individuals in county societies, you control the future of medicine. You will hear from the next speaker all the first hand details of modern economics and social questions as they concern the practice of medicine. If each of you in your daily contacts with your patients would take one or two minutes and talk to them concerning what type of medical practice is best for them, we could soon educate the entire United States. If 130,000 physicians of the A. M. A. would do just this thing every day, the public would not permit any radical socialistic change.

In closing, may I again thank you for the privilege and honor of being your president this past year, and may I ask that each and every one of you consider yourselves a committee of one to educate your patients as to the benefits of the present American system of medical practice.

CORRESPONDENCE

May 13, 1939

Dr. W. R. Brooksher
Secretary of the Arkansas Medical Society
Fort, Smith Arkansas
My dear Doctor Brooksher:

I was quite impressed with your Society's personnel and officers, and I want to thank you for the courteous treatment that I received.

* * *

Very truly yours,

E. D. TWYMAN.

May 13, 1939

Dr. W. R. Brooksher, Secretary
Arkansas Medical Association
Fort Smith, Arkansas
Dear Dr. Brooksher:

Your letter of the 11th received, and I certainly appreciate very much your thoughtfulness in sending us the resolution adopted by the Medical Society in regard to your convention which was held at the Arlington.

I am awfully glad to know that they were pleased and it certainly was a pleasure for us to have them meet at the Arlington and we hope to have them back many times in the years to come.

With best wishes to you from us all at the Arlington, I am

Yours very truly,

W. E. CHESTER,

President and Gen'l Mgr.

PRELIMINARY REPORT OF THE
AMERICAN MEDICAL ASSOCIATION
STUDY OF FREE MEDICAL SERVICES

The Committee on Supply of Medical Service appointed by the Board of Trustees of the American Medical Association recommended a special study of the amount of free services rendered by physicians and dentists throughout the United States. The Bureau of Medical Economics prepared a record form to be kept for one week by physicians and dentists during each of three periods selected to obtain a representative sample of services rendered during one year.

To date physicians and dentists in 453 counties in 33 states have completed and returned 12,549 forms which represent actual daily records of free medical and dental services rendered. Each physician or dentist was instructed to keep the record on his desk during a period of one week and to mark in the proper place on the form the information requested. Such records were kept during three different periods: July 1 to September 20, 1938; September 21 to December 20, 1938; and December 21, 1938, to March 1, 1939. Each record form called for three definite sets of information:

1. **The number of persons given medical services or referred to some source for medical care.** To obtain this information, space was allowed on the form for the physician to keep a daily record for one week of the total number of persons who received any form of medical or dental services in the office and in the home, the total number of such persons who were served without charge, and the total number of such persons referred to some other source for free medical care.
2. **Free surgical services.** Each physician was asked to keep a daily record for one week of the number of surgical operations of all types for which no charge was made and no compensation received, whether the operation was performed in the office, the patient's home, or in the hospital.
3. **Abuse of free services.** Physicians were asked to discuss their observations and experience concerning any abuses that may exist in their communities in the hospital, dispensary or clinic facilities and services intended for the indigent sick.

Dentists were likewise asked to keep similar records for free dental services. The physician or dentist keeping the form was requested to

indicate the number of years in practice and the type of practice, as well as the starting and closing dates for the period over which the record was kept.

The record of the number of persons receiving free medical services was restricted to the persons seen in the office and the home because information concerning free services rendered in hospitals, clinics or other institutions was to be obtained on other forms in the general Study of Need and Supply of Medical Care. Likewise, only those persons were included who received services without charge and from whom no payments were received or expected by the physicians or dentists. The instructions were specific that no persons were to be included where there was a possibility that the physician would be paid from some source such as relatives or friends of the patient or welfare, relief or philanthropic agencies. The instructions also specifically called for the exclusion of persons for whom charges could not be collected. Frequently it is a practice for physicians or dentists to enter a charge in their records even though they do not expect to receive payment. The exclusion of all such patients who constitute delinquent debtors or "enforced charity" was necessary in order to avoid including any patients from whom some payments might possibly be received later.

In regard to the observations and experiences concerning abuses of facilities and services for the indigent sick, the replies ranged from no comment to carefully prepared suggestions and criticisms of the organization of medical services for the indigent in the community. These observations were carefully grouped into five main categories that were indicated from the replies.

Table I shows the number of forms received during the three periods of the Study from July, 1938, to March, 1939.

TABLE I.—STUDY OF FREE MEDICAL CARE
(Form IF)

Number Forms Edited and Used in Tabulation	10,486
Two or More Doctors Reporting on One Form.....	56
Not Used in Study (Incomplete or Inaccurate)	2,007

Total Number of Forms IF Received (All Periods).....	12,549
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All records received were carefully examined to make certain that the instructions had been followed and that the information recorded was legible and accurate. The records which were incomplete or improperly completed were discarded. The information contained in 10,486 completed records of free medical and dental

services was placed on punch cards for machine tabulation. Fifty-six forms were kept as a combined record by two or more physicians. These forms were separated from the forms kept by individual physicians and were tabulated separately.

Representativeness of the Replies

A total of 8,820 daily records of free medical services were kept by physicians for one week in each of the three periods. These records were distributed fairly equally in each of the three periods of the Study as there were in excess of 2,000 records for each period.

First it was necessary to determine whether the records received were representative of medical practice throughout the country. This required an examination of the records according to essential factors which might influence the replies by physicians, such as length of time in practice, type of practice, geographic location, and the time of year the record was kept.

The tabulation of 8,418 records revealed that the physicians reporting had practiced medicine an average of 19 years. This average length of time in medical practice coincides with the length of time in practice shown by other studies such as "Distribution of Physicians in the United States" which is based on information furnished in the American Medical Directory.

A group of 8,861 records also indicated the various types of practice for the physicians replying. The distribution of replies among the several types of practice again coincides fairly closely with known information concerning the distribution of physicians according to specialties. More than 60 per cent of all replies were received from general practitioners, with the remaining replies distributed among all the specialties in approximately the same proportion that each specialty bears to the total number of physicians. The physicians who indicated some special type of practice were considered as specialists, although many probably were not limited specialists in the sense of devoting full time to a special type of medical practice. This distribution of more than 60 per cent of replies from general practitioners and less than 40 per cent from specialists and those devoting special attention to a specialty is in accord with the known distribution of physicians in these two classifications.

Tabulation was also made of the distribution of the records according to states. Again the geographical location of the physicians, who

completed records, in 450 counties in 31 states affords a fairly representative cross section of the physicians in the United States.

The replies were collected in each of three different periods of the year in order to obtain information that would include seasonal variations in the number of patients, inasmuch as the number of patients is dependent on fluctuations in the incidence of illness. For example, several studies indicate that the months of December, January and February have a higher incidence of illness than the summer months such as June and July. In all, eight months or two-thirds of a year was the total time included in the three periods during which physicians kept weekly records of free medical services. These same eight months would probably account for 70 per cent of the total incidence of illness. Records kept during this period included weeks when the incidence of illness was high and weeks when the incidence was low. Consequently, the average of the number of patients reported in the records included in the Study would be representative of an average week during a year.

Information Obtained

The essential information revealed by the tabulation of records kept by physicians is as follows:

Number of Persons Treated by Physicians.—A total of 8,633 weekly record forms indicated that 730,387 persons received medical services from physicians in the office or the home. This represents an average of about 84 persons who received medical services in the office or the home from each physician during each week.

Number of Persons Given Free Medical Services.—A total of 8,571 records of free medical services showed that 117,305 persons were given free medical services by physicians in the office and the home. This represents an average of about 13 persons who received free medical services in the office or the home from each physician during each week.

The number of persons who receive free services amounts to 15 per cent of the total number of persons treated by the physician in the office and the home. The number of persons treated free by physicians in clinics or in outpatient departments or wards of hospitals is not included. Likewise, patients who receive services but fail to pay are not included. Several studies show that this latter group comprises some 20 per cent of the physician's practice.

Including both the patients treated free and those who fail to pay for medical services, the

physician receives no remuneration for approximately 35 per cent of the persons treated in the office and the home.

Number of Persons Referred to Some Other Source for Free Medical Services.—Information reported in 6,957 records of free medical services completed by physicians indicates that 12,188 persons were referred to some other source for free medical services. This represents an average of about 2 persons who were referred for free medical services by each physician during each week.

Free Surgical Operations.—Physicians, in keeping the record form, were also asked to report the number of free surgical operations of all types performed for which no charge was made and no compensation was received. A total of 5,642 completed records showed that 11,098 such free surgical operations were performed. This represents an average of about 2 free surgical operations each week.

Observations and Experiences.—The final information requested in the record of free medical services asked for comments by the physicians based on their observations and experiences concerning any abuses of facilities and services intended for the indigent sick in the community. The comments in reply to this request fell into the following five main categories:

First, those which pointed out that excessive free services were offered by clinics, outpatient departments and hospitals and that unjust demands for free services were made by persons able to pay. (1,033 or 39 per cent of the total comments were of this type.)

Second, those which stated that persons requiring free medical services were well cared for and that there were no significant abuses in the facilities and services for the indigent. (892 or 34 per cent of the total comments were of this type.)

Third, those which suggested that there were insufficient funds, facilities or organization for certain classes such as transients, accident cases, WPA workers, etc., who are not included in the general program for the care of the indigent. (478 or 18 per cent of the total comments were of this type.)

Fourth, those which complained of political control or inefficiency of public welfare administration as being responsible for lack of more satisfactory services. (199 or 8 per cent of the total comments were of this type.)

Fifth, those which complained of the inability of the county physician, county hospital or free clinic arrangements to cope with the growing demands for free services. (26 or 1 per cent of the total comments were of this type.)

Interpretation of Information Obtained

The information obtained from the records of free medical services can be used as a basis for determining many of the factual elements in the practice of medicine. For example, an estimate can be made of the total patient load during a year, the total number of patients treated free in one year, the value of free services, the probable costs per treatment for services in the home and the office, the gross and net income from services rendered in the home and the office and similar data. However, these estimates, which must be carefully made and based on sound interpretations, will be included in the more detailed report to be completed in the near future. This complete report will contain additional records from physicians and will present other information concerning free medical services such as the relation of free services to type of medical practice and to geographical location of physicians. Information obtained from the joint records kept by two or more physicians will also be compared with the information from individual physicians. Likewise, an analysis of the information obtained from dentists will be included.

Bureau of Medical Economics—May, 1939.

CORRESPONDENCE

April 8, 1939

Dear Bill:

Here is the picture. I tried and tried to inveigle enough money from my unsuspecting patients for a new suit but when I got through I found I had only \$4.98, and my wife thought maybe the old one would look just as well. The photographer managed to take most of the soup spots off the front in the finished print, which I consider quite a testimonial to the art of photography.

I hope the durned picture is all right.

Regards,

A. S. Buchanan.

RECENT SUPREME COURT DECISIONS

The Medical Lien Law (Act 130 of 1933; sec. 10818, et seq., Pope's digest) was construed by the Supreme Court of Arkansas in the recent case of

Buchanan v. Beirne Lumber Co., decided Feb. 6, 1939,

wherein this law was upheld.

In that case a physician and a nurse each filed claims in the proper manner, and suit was filed against the lumber company by a person who was in its employ as a truck driver, he having been severely injured, and who alleged negligence on the part of the lumber company.

The case was never tried by the court, as the lumber company settled the damage suit for \$4,000, without paying the claims of the physician and nurse, and secured a dismissal of the suit. The physician and nurse on learning of the settlement and dismissal of the suit, asked the court to set that order aside as to their claims of liens, and this was done. The lumber company defended on the ground that even though it made the voluntary settlement with the injured employee, it was not liable as it was not a tort-feasor, as it was not through its fault or negligence that the employee was injured. In proof of that fact it took from him a release absolving it from blame.

The Supreme Court held that under these facts the lumber company was liable, and required it to pay the amount of the liens, amounting to \$1,270. The court thus held that the lien given to physicians, nurses and hospitals, by our lien law, cannot be defeated by settlement with the injured party.

The court took occasion to say: "The remedial object of the statute was to prevent the very thing that has occurred in this case. It was enacted for the very humane purpose of encouraging physicians, hospitals and nurses to extend their services and facilities to indigent persons who suffer personal injuries through the negligence of another, by providing the best security available to assure compensation for services and facilities. As we view it, there is no burden placed on industry, nor does it tend to discourage settlements. The alleged tort-feasor may defend the action in the courts. If there is no liability to the plaintiff the lien claimant loses his claim for services. If the case is compro-

mised, all the tort-feasor has to do is either to pay the lien claimant, or get a written release of the lien claim from him."

Statute of Limitations

In the case of

Steele v. Gann, decided Jan. 9, 1939,

the plaintiff stated that on March 29, 1926, the defendant performed an operation on her for gall stones and hernia; that 2 months thereafter she began suffering pains in the region of the gall bladder, which suffering continued until the date of a reoperation on March 26, 1936; that upon entering the region where the gall bladder should have been there was encountered an enlarged abscessed mass, and a guaze sponge was found; that said gauze had been left in the cavity at the time of the operation in 1926, and that it caused the pain; that this was due to the careless and negligent conduct of said operation by the defendant or those under his direction. The court said: "There does not appear to be anything in Act 135 of the Acts of 1935 to indicate that it was the intention that it should apply only to causes of action brought after the Act became effective."

The Act reads: "Hereafter all actions * * * for malpractise, error, mistake or failure to treat or cure, against physicians, surgeons, dentists, hospitals and sanatoria, shall be commenced within 3 years after the cause of action accrues. The time of the accrual of the cause of action shall be the date of the wrongful act complained of and no other time."

In other words, the court held that the law means just what it says. A physician, nurse, or hospital must be sued within 3 years of the alleged wrongful act, or the suit is barred. In the case of

Burton v. Tribble, 189 Ark. 58, decided April 16, 1934,

the facts were that an operation was performed in 1926, and suit was not commenced until 1933, the plaintiff alleging that the injury had not been discovered until a year before the filing of the suit, and the court said that under the then existing law, such a suit could be successfully maintained. To correct that situation, we prepared a bill, at the direction of the Council, which was enacted into law by the 1935 Legislature, with the result as stated in the Gann case.

—Peter A. Deisch.

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Second District—M. C. HAWKINS, Jr.	Searcy
Third District—J. O. RUSH	Forrest City
Fourth District—S. W. DOUGLAS	Eudora
Fifth District—R. B. ROBINS	Camden
Sixth District—DON SMITH	Hope
Seventh District—EUCLID SMITH	Hot Springs
Eight District—VAL PARMLEY	Little Rock
Ninth District—J. F. JOHN	Eureka Springs
Tenth District—CLYDE McNEIL	Rogers

EDITORIALS

OUR PRESIDENT

Albert S. Buchanan, installed as President of the Arkansas Medical Society at the Hot Springs session May 10th, was born January 18th, 1881, at Prescott. His medical education was received at the University of Arkansas School of Medicine, from which he graduated in 1905. The following year was spent in postgraduate study in New York City and London. Throughout the intervening years he has attended numerous postgraduate sessions at the Mayo Clinic, New York Polyclinic and at Tulane University. In 1913, with his brother, Dr. Gilbert A. Buchanan, he founded a hospital at Prescott, later named the Cora Donnell Hospital. Since his brother's death in 1913 he has managed the hospital alone, specializing in surgery. He married Miss Ethel Tompkins in 1908 and the couple have two daughters.

For his entire professional life he has been an enthusiastic member of organized medicine, serving as president of the Nevada County Medical Society, of the Tri-County Clinical Society, of the Sixth Councilor District Medical Society and

of the Tri-State Medical Society. He has served as delegate from his county medical society to the state society for many sessions. He is a Fellow of the American Medical Association and of the American College of Surgeons. Perhaps his greatest service to the cause of organized medicine was the two terms which he filled on The State Medical Board of the Arkansas Medical Society, as secretary of which for eight years, he gave unstintingly of his time toward elevation of the requirements for licensure, an aim which he has been able to realize in good measure. His civic interests include the Rotary Club, of which he is a past-president, presidency of the Prescott Athletic Association and of the Men of the Church of the Presbyterian Church.

Known to practically every member of the Society, loved by all for his ceaseless devotion to the principles and ethics of organized medicine, an untiring surgeon, a jovial personality, a sincere thinker, a proven worker in the Society, he brings to the Presidency a combination of talents and the will to surmount obstacles which insure that 1939-1940 will be a year of great accomplishment for medicine in Arkansas.

DIRECTORIES AGAIN

The directory racket has again appeared in Arkansas. This time the worn-out theme is embellished with a fee schedule which the honored physician is asked to sign. The Journal again calls attention to the fact that these directories but serve to profit the promoters as investigation shows that insurance companies place no faith in them when making appointments. That these schemes can persist is acknowledgment of the frailty of the medical profession. Were all physicians to immediately consign such sales talks to the waste basket, the racket would fold up over night. By action of the House of Delegates of the American Medical Association on a resolution introduced by the Arkansas Medical Society in 1936, participation in these directories was declared unethical practice. Members are urged to abide by the ethics and, at the same time, save those five and ten-dollar payments for better use.

THE HOT SPRINGS SESSION

394 members of the Arkansas Medical Society registered attendance at the 1939 annual session held in Hot Springs National Park May 8th-10th. There was unanimous opinion that the scientific program was one of the best ever presented before the Society. The Garland County Med-

ical Society with its usual gracious courtesy made the Monday afternoon dutch supper on the shore of Lake Hamilton and the annual banquet session Tuesday night highlights of the social side of the gathering. Opportunity was afforded for four or more alumni gatherings which contributed to the general gayety of the three day meeting. The final session of the House of Delegates elected the following officers: President-Elect, H. T. Smith, McGehee; First Vice-President, J. M. Proctor, Hot Springs National Park; Second Vice-President, B. L. Moore, El Dorado; Third Vice-President, T. J. Stewart, Wynne; Treasurer, R. J. Calcote, Little Rock; Secretary, W. R. Brooksher, Fort Smith; Councilor, First District, F. D. Smith, Blytheville; Councilor, Third District, J. O. Rush, Forrest City; Councilor, Fourth District, S. W. Douglas, Eudora; Councilor, Fifth District, R. B. Robins, Camden; Councilor, Seventh District, Euclid Smith, Hot Springs National Park; Councilor, Ninth District, J. F. John, Eureka Springs; Delegate to the American Medical Association, W. R. Brooksher, and Alternate, Val Parmley, Little Rock. The 1940 session will be held in Fort Smith. The Council reorganized, electing Val Parmley, Chairman, and Euclid Smith, Secretary.

OBSTETRIC REFRESHER COURSE

For the information of members the schedule of the postgraduate course in obstetrics conducted under the auspices of the Arkansas Medical Society and the Arkansas State Board of Health is published.

Prescott—Hotel Loda—Mondays—June 5, 12, 19, 26th and July 3rd.

McGehee—Greystone Hotel—Tuesdays—June 6, 13, 20, 27th and July 4th.

Jonesboro—Hotel Noble—Wednesdays—June 7, 14, 21, 28th and July 5th.

Conway—Courthouse—Thursdays—June 1, 8, 15, 22, 29th and July 6th.

Fort Smith—Saint Edwards Mercy Hospital—June 2, 9, 16, 23, 30th and July 7th.

The course is open to all licensed physicians without charge and is to be conducted by Dr. H. Close Hesseltine, Assistant Professor of Obstetrics and Gynecology, University of Chicago.

Over sixty registrations for the course had been received in the office of the state secretary May 26th.

PROCEEDINGS OF SOCIETIES

The Lonoke County Medical Society was addressed April 12th by Drs. W. C. Langston and E. H. White of Little Rock.

The Pulaski County Medical Society was addressed May 1st by Ira H. Lockwood, Kansas City, on "Prepayment Plans for Hospital and Medical Service."

E. H. White, Secretary.

The Sebastian County Medical Society was addressed May 2nd by D. W. Goldstein on "Physical Therapy in Dermatology."

Ralph E. Weddington, Secretary.

The Lawrence County Medical Society was addressed April 25th by H. B. Hull, "Danger of Infections About the Face," and A. G. Henderson, "Organized Medicine."

T. C. Guthrie, Secretary.

The Washington County Medical Society was addressed May 2nd by Raymond C. Cook, Little Rock, "External Diseases of the Eye," and Geo. V. Lewis, Little Rock, "Acute Suppurative Pericarditis."

J. F. Lewis, Secretary.

The Tri-County Clinical Society was addressed at Arkadelphia April 27th by W. O. Arnold, Fort Smith, "Bronchiectasis"; A. B. Dickey, State Sanatorium, "The Differential Diagnosis of Tuberculosis," and C. R. Williams, State Sanatorium, "The Surgery of Tuberculosis."

The Arkansas State Pediatric Society met in the Arlington Hotel, Hot Springs National Park, May 8th, for the following program: "Some Objections to Routine Circumcision," J. W. Harper, El Dorado; "Functions of Coordination with Child and Maternal Welfare Bureau and Some of Their Plans for the Ensuing Year," A. C. Kirby, Little Rock, and "Bleeding from the Bowel in Children," Jos. Brennemann, Chicago. A round table luncheon followed the scientific session and the following officers were elected: Don Smith Hope, President; Madeline Melson, Little Rock, Vice-president, and B. D. Luck, Jr., Pine Bluff, Secretary-treasurer.

The Pulaski County Medical Society was addressed May 22nd by H. W. Hundling, "Diverticulitis and Diverticulosis of the Bowel."

E. H. White, Secretary.

PERSONALS AND NEWS ITEMS

The Little Rock Exchange Club was addressed April 17th by D. A. Rhinehart on "Socialized Medicine."

Raymond T. Smith, Fort Smith, has been appointed a member of the Hospital Advisory Committee to the Public Welfare Department.

The April Tri-State Medical Journal was designated El Dorado Edition and contained the following articles: "El Dorado—The Oil Capital of Arkansas," W. S. Riley; "The Treatment of Peptic Ulcer," J. B. Wharton, Jr.; "Complications of Appendicitis," H. J. Mayfield, and "Health Officer's Problems—Measles," F. O. Mahony.

Thos. Douglass has been elected a director of the Ozark Rotary Club.

BORN—On April 19th, a son, to Dr. and Mrs. T. P. Foltz, Fort Smith.

W. B. Grayson, Little Rock, has been elected President of the State and Provisional Health Officers of North America.

W. F. Adams addressed the Christian Church Circle, Fort Smith, April 24th, on "Diseases Prevalent in Middle Life."

Fred Krock addressed the Fort Smith Lions Club April 25th on "Cancer."

The Tri-State Society of X-ray Technicians was addressed at Little Rock in April by H. L. Fuller, Jerome S. Levy and D. A. Rhinehart.

E. E. Barlow has been elected a director of the Dermott Rotary Club.

C. A. Archer has been elected a director of the DeQueen Rotary Club.

Paul Mahoney, Little Rock, was accepted into membership of the American Triological Society at Chicago May 9th.

Robert Hood has been elected vice-president of the Russellville Reserve Officers Association.

Euclid Smith, Hot Springs National Park, has been elected a member of the American Rheumatism Association.

The following attended the meeting of the American Society of Clinical Pathologists in Saint Louis during May: A. F. DeGroat, Little Rock; M. J. Kilbury, Little Rock; and D. C. Lee, Hot Springs National Park.

C. H. Lutterloh, Hot Springs National Park, has been selected as a member of the American Balneological Association and attended the organization meeting of the Society in Saratoga Springs, New York, in May.

Everett C. Moulton, Fort Smith, opened the discussion of "Malignant Melanoma of the Uvea" by T. L. Terry, Boston, at the Section of Ophthalmology, American Medical Association, May 18th.

W. C. Langston, W. J. Darby, and P. L. Day, Little Rock, presented the scientific exhibit, "Nutritional Cytopenia (Vitamin M Deficiency) in the Monkey" at the recent session of the American Medical Association.

W. C. Porter, Ozark, has been elected president of the Coal Belt Baseball League.

J. B. Tucker recently addressed the Men's Club of the Bentonville Presbyterian church on "Public Health Work."

John W. Smith addressed the Little Rock Lions Club recently on "Removal of Foreign Bodies from the Lungs and Esophagus."

J. S. Miller, Parkin, has been elected vice-commander of the seventh district of the American Legion.

Sterling P. Bond, Little Rock, has been appointed a member of the Basic Science Board of Examiners.

John M. Samuel, Little Rock, spent a May vacation in Wisconsin.

J. S. Rinehart, Camden, was elected an affiliate fellow the American Medical Association at the Saint Louis session.

"Deep Neck Abscesses" by Paul L. Mahoney, Little Rock, appeared in the May issue of the Southern Medical Journal.

J. G. Gladden has been elected a director of the Harrison Lions Club.

S. C. Fulmer, Little Rock, has been elected an associate fellow of the American College of Physicians.

J. S. Southard has been elected surgeon of the Fort Smith post of the American Legion.

Charles R. Henry and E. H. White, Little Rock, have been certified as diplomats of the American Board of Obstetrics and Gynecology.

G. L. Hardgrave has been elected vice-president of the Clarksville Lions Club.

C. H. Smythe has moved from Stephens to Texarkana.

Registrants at the Saint Louis session of the American Medical Association:

George B. Alcott, Weiner; E. Baker, Dermott; E. E. Barlow, Dermott; J. E. Beasley, Blytheville; W. M. Blackshare, Hot Springs National Park; M. E. Blanton, Jonesboro; Mitchell Blaine, Mammoth Spring; C. N. Bogart, Forrest City; M. B. Bowman, Hot Springs National Park; J. P. Bremer, Point Cedar; W. R. Brooksher, Fort Smith; E. R. Browning, Hot Springs National Park; W. H. Bruce, Pine Bluff; J. W. Burnett, Texarkana; F. M. Burton, Hot Springs National Park; R. J. Calcote, Little Rock; G. O. Campbell, Trumann; M. W. Cantrell, Marked Tree; P. B. Carrigan, Hope; F. W. Carruthers, Little Rock; A. G. Cazort, Little Rock; W. W. Chamberlain, Hot Springs National Park; C. R. Chesnutt, Little Rock; O. H. Clifton, Rector; G. C. Coffey, Hot Springs National Park; O. T. Cohen, Jonesboro; A. E. Cone, Portland; A. E. Cox, Helena; A. W. Cox, Helena; J. B. Crawford, Little Rock; W. S. Crawford, Marianna; Bryce Cummins, Little Rock; M. L. Dalton, Brinkley; S. G. Daniel, Marshall; W. J. Darby, Little Rock; P. L. Day, Little Rock; C. H. Dickerson, Conway; V. P. Diederich, Hot Springs National Park; J. A. Dillman, Paragould; S. N. Doane, Arkadelphia; C. S. Early, Camden; E. F. Ellis, Fayetteville; L. E. Ellison,

Warren; M. E. Foster, Fort Smith; R. E. Fowler, Harrison; Dewell Gann, Jr., Little Rock; C. E. Garratt, Hot Springs National Park; Wm. Gibson, Nashville; A. A. Gilbert, Fayetteville; D. W. Goldstein, Fort Smith; W. B. Grayson, Little Rock; C. A. Hardesty, Paragould; F. P. Hardy, Searcy; W. B. Harrell, Jr., Jonesboro; P. L. Hathcock, Fayetteville; W. W. Hatcher, Imboden; M. C. Hawkins, Jr., Searcy; C. M. Harwell, Osceola; J. H. Hellums, Dumas; N. C. Hodge, Marianna; A. F. Hoge, Fort Smith; N. T. Hollis, Little Rock; H. W. Hundling, Little Rock; Earle A. Hunt, Clarksville; J. L. Jackson, Harrison; O. A. Jamison, Tuckerman; C. W. Jones, Benton; H. Fay H. Jones, Little Rock; M. C. John, Jr., Stuttgart; R. H. Johnston, Clarksville; Glenn H. Johnson, Little Rock; M. J. Kilbury, Little Rock; K. K. Kimberlin, Tuckerman; L. E. King, Hot Springs National Park; O. H. King, Hot Springs National Park; C. E. Kennedy, Smackover; O. R. Kelly, Sheridan; A. C. Kirby, Little Rock; O. J. G. Koobs, Rogers; L. J. Kosminsky, Texarkana; Edward Kultgen, Elaine; W. C. Langston, Little Rock; P. S. Lanier, Forrest City; M. G. Lawson, Benton; D. C. Lee, Hot Springs National Park; J. S. Levy, Little Rock; Geo. V. Lewis, Little Rock; V. O. Lesh, Fayetteville; C. H. Lutterloh, Hot Springs National Park; J. R. Lynn, Hazen; Rufus Martin, Warren; E. C. Moulton, Fort Smith; J. G. Mitchell, El Dorado; N. E. Murphy, Clarendon; H. A. Murphy, El Dorado; O. C. Melson, Little Rock; H. E. Mobley, Morrilton; W. H. Mock, Prairie Grove; E. J. Munn, El Dorado; J. H. McCurry, Cash; E. D. McKelvey, Paragould; Jim McKenzie, Hope; L. C. McVay, Marion; E. C. McMullen, Pine Bluff; R. Q. Patterson, Little Rock; V. L. Payne, Pine Bluff; J. T. Polk, Keiser; B. V. Powell, Camden; C. V. Powell, Forrest City; T. G. Porter, Hazen; A. R. Power, Hot Springs National Park; Joe W. Reid, Arkadelphia; B. A. Rhinehart, Little Rock; D. A. Rhinehart, Little Rock; R. R. Robins, Texarkana; Clyde Rodgers, Little Rock; Joe H. Sanderlin, Little Rock; R. E. Schirmer, Blytheville; F. J. Scully, Hot Springs National Park; Friedman Sisco, Springdale; R. M. Sloan, Jonesboro; E. M. Smith, Hot Springs National Park; F. D. Smith, Blytheville; Harvey Shipp, Little Rock; J. E. Stevenson, Fort Smith; D. B. Stough, Hot Springs National Park; A. W. Strauss, Little Rock; P. T. Stroud, Jonesboro; E. B. Swindler, Stuttgart; Frank Vinsonhaler, Little Rock; Charles Wallis, Little Rock; B. L. Ware, Greenwood; E. H. White, Little Rock; R. H. Whitehead, DeWitt; J. S. Wilson, Monticello; S. R. Williams, State Sanatorium; R. P. Woods, Altheimer; H. K. Wright, Hot Springs National Park; J. C. Young, Jonesboro.

OBITUARY

JAMES WILLIAM FELTS, aged 54, died at his home March 31st of injuries received in an automobile accident near Jonesboro, Arkansas. Born and reared in Sharp County, where he received his preliminary education, he began the practice of medicine at Strawberry in 1912 and later moved to Alicia, where he had continuously practiced. Surviving relatives are four sons and one daughter.

PROCEEDINGS
OF THE
SIXTY-FOURTH ANNUAL SESSION
OF THE
ARKANSAS MEDICAL SOCIETY
ARLINGTON HOTEL, HOT SPRINGS NATIONAL PARK
May 8th, 9th and 10th, 1939

FIRST SESSION, HOUSE OF DELEGATES
MAY 8, 1939, 9:30 A. M.

The meeting was called to order by S. J. Wolfermann, President. The following delegates and county society members seated as delegates in the absence of regularly elected delegates by action of the House of Delegates were present:

M. C. John, Arkansas; M. C. Crandall, Ashley; Geo. M. Love, Benton; J. H. Fowler Boone; J. F. John, Carroll; E. Baker, Chicot; Joe W. Reid, Clark; F. H. Jones, Clay; Junius Ruth, Cleveland; W. W. Verser, J. T. Altman, Craighead-Poinsett; S. D. Kirkland, Crawford; J. P. Price, Drew; O. M. King, J. M. Proctor, J. S. Stell, Garland; Miles F. Kelly, Grant; R. J. Haley, Jr., Greene; W. G. Hodges, Hot Spring; M. B. Owens, Jackson; J. M. Lemons, Jefferson; J. M. Kolb, Johnson; C. W. Chaffin, Lee; P. H. Phillips, Little River; B. C. Middleton, Miller; F. D. Smith, Mississippi; G. E. Watkins, Montgomery; R. C. Kennerly, Ouachita; A. H. Maddox, Phillips; L. M. Smith, Pope-Yell; J. R. Lynn, Prairie; Hoyt R. Allen; S. C. Fulmer, H. W. Hundling, M. J. Kilbury, Geo. V. Lewis, Joe F. Shuffield, Pulaski; J. W. Brown, Randolph; J. O. Rush, St. Francis; Dewell Gann, Sr., Saline; Chas. S. Holt, H. Moulton, Sebastian; C. C. Hanchey, Sevier; B. L. Moore, Union; S. J. Allbright, White; A. H. Hathcock, Washington, and C. E. Dungan, Woodruff.

Other members of the House of Delegates present were: President Wolfermann, Councilors, H. A. Stroud, M. C. Hawkins, Jr., T. J. Stewart, H. T. Smith, R. B. Robins, Euclid Smith, Val Parmley, D. L. Owens and Clyde McNeil, Secretary Brooksher, and Past-Presidents E. E. Barlow, E. F. Ellis, Geo. B. Fletcher, L. J. Kosminsky, J. M. Lemons, H. Moulton, M. E. McCaskill, M. L. Norwood, D. A. Rhinehart and W. T. Wootton.

S. J. Allbright reported that the Committee on Credentials (Allbright, J. H. Fowler and C. C. Hanchey) had examined the credentials, found them in order, and that a quorum was present.

By motion the minutes of the Sixty-third Annual Session as published in the June, 1938 issue of The Journal of the Arkansas Medical Society were adopted as correct.

President Wolfermann appointed the following Reference Committee: M. L. Norwood, H. Moulton, H. T. Smith.

Vice-presidents R. R. Kirkpatrick and S. W. Douglas took seats on the rostrum.

President Wolfermann read the President's Address to the House of Delegates.

PRESIDENT'S ADDRESS TO HOUSE OF DELEGATES

Since the organization of this Society it has been customary for the president to address the House of Delegates on some non-scientific subject pertinent to the association.

I shall not bore you with any long address. During my ten years on the Council and this year as President, I have noticed some rules and customs that I believe could be improved upon and some of these I wish to present to you this morning for your deliberation.

Chapter 5 of the By-Laws of our Constitution, entitled "Election of Officers," states among other things, that the nominating committee shall report three names to the House of Delegates to be voted upon for president. Now, on the face of it, this looks like a very good rule, but it also has some serious drawbacks. Most often in the last twenty years, though there have been exceptions, two candidates have really been in the race and the third nominee has been a sacrifice candidate. So much so at times that it has often been difficult to get a third man to consent to let his name come up, or a member of the nominating committee has not wanted the name of a man from his district to come up as a third man. This as you can well see has put some of our members in an embarrassing position just to comply with the constitution. Now on the other side, some excellent men believe that in spite of this embarrassment it is a good rule, for it at least puts a man's name before the House of Delegates for consideration at a future date.

I personally believe the embarrassment phase far outweighs the advantages for the third party

and would recommend that the constitution be amended, requiring the nominating committee to always bring forth at least two names instead of three, but leaving it to the discretion of that individual nominating committee each year to decide whether or not they wished to bring forth the third man. That is, having the article read "two or more." I truly believe this would be less embarrassing to our membership.

As a past member of the council, we have been much concerned with the Society's finances. One of our big expenditures is the program and the state meeting. Our secretary is an ex-officio member of all committees, but I believe it would aid the finances of the Society and particularly the expenditures of the annual meeting if constitutionally the secretary were chairman of the program committee. The incoming president each year could appoint his three members to this committee, as before, but the secretary could best correlate program and finances.

Now, I have another rather touchy subject to bring up which has been on my mind several years, and due to certain circumstances this becomes the ideal time for its consideration. It concerns our State Board of Medical Examiners.

From its inception it has been the State Medical Board of the Arkansas Medical Society. At least that has been its name. We as a society have elected the men from which the governor made his appointments. The Board has always been composed of our best men and has annually reported to us. But as a financial unit it has existed independently, and if it made any money it was divided among the Board members. That is in no way a criticism, for it has always been that way. Years when it cost money to administer, the board paid for it.

I think the time has come to rearrange the finances of the board. To work out some system whereby members get their expenses and a per diem rate if you please, and then a savings account or fund be established to the account of the Board in the name of the Arkansas Medical Society. With the present trends in medicine, present and future litigations, a fund is and will be necessary, and the board should no longer be on the spoils system, but rather established on a sound financial basis. At no time in the history of the Arkansas Medical Society could it be more opportune than now, for our incoming president knows as much or more about the board than any living member

of this society and could best, I believe, supervise such reorganization. I know he is favorable to it. In fact I believe he originated the first embryonic idea and I am sure if you approve, he will carry it to a successful conclusion.

A worthy project upon which to reflect is our medical school. I do not know the percentage of our society who are graduates of the Arkansas Medical School. I do not think it is essential. Those of us who are not Arkansas graduates are certainly residents of Arkansas. This is our state and certainly a state is known by its educational institutions. If Arkansas needs a medical school, and I truly believe it does, then it behooves us all, whether alumni of the school or not, to get in behind this institution and make it a school of which we can be justly proud.

In conclusion may I again thank this body for the honor it has conferred upon me. I leave this office this year after eleven consecutive years in some elective office of this Society. I sincerely and truly appreciate the many honors and courtesies. At times it has meant hard work and there have been some sacrifices, but always it has been some fun and a great pleasure, and I feel humbly indebted to you all.

The Committees of the Society then reported in order, their reports being referred to the Reference Committee.

COMMITTEE ON SCIENTIFIC WORK

R. B. ROBINS, Chairman

The results of the efforts of your Committee on Scientific Work are now about to materialize. We have attempted to provide for you a well diversified program and have tried to make it a very practical one.

Nine distinguished physicians from outside the state have accepted invitations to visit us and appear on the program.

In addition to our out-of-state guests, there are sixteen Arkansas physicians on it.

We offer our thanks to all of those who are participating and we sincerely hope that the membership at large will find this a profitable meeting.

COMMITTEE ON MEDICAL LEGISLATION

JOSEPH F. SHUFFIELD, Chairman

During the 1939 session of the legislation, 3 bills were enacted into laws of interest to the profession. Many attempts were made to pass laws that would have been injurious to our profession and to repeal some of our most valuable laws.

For many years the medical department of the University of Arkansas, has been struggling to maintain its class "A" rating. The requirement that it have under its control, a minimum of 200 beds, had heretofore

been met by more or less informal agreements with the various hospitals of Little Rock, with the promise to the Council on Medical Education of the A. M. A., that better arrangements would be made in the future. Nothing definite, however, was ever accomplished, until finally, in the middle of the year 1938, that body gave its ultimatum to the effect that general hospital of at least 200 bed capacity, under the exclusive dominion and control of the medical school, must be provided not later than July 1, 1939, or the school would lose its rating. This would not only have been disastrous to the school, but it would probably have cost its very existence, as our law provides that only graduates of class "A" schools are eligible for license.

The annual appropriation for the school had theretofore been \$70,000 a year. To carry out the mandate of the Council on Medical Education would necessitate an annual appropriation of \$300,000 a year, \$100,000 for school, \$200,000 for hospital, or an increase of \$230,000. With the assistance of the governor, who has been our friend throughout all the negotiations, means were found to do this, and an appropriation of the required amount was made for the next two years. Before this could be done, it was necessary that a new source of revenue be found, and this was done by an increased tax on beer and whiskey, and an additional bill was passed, providing that if the supreme court should declare those laws invalid, the necessary funds should come from the unapportioned land redemption fund.

It is doubtful if we could have succeeded in this undertaking without the active and continuous assistance of the alumni, of the University of Arkansas School of Medicine, under the leadership of their president, Dr. Euclid Smith, who brought to this work an enthusiasm and vigor that inspired us to do our best. If the school continues to have such friends in the future, its place in our educational system will be assured.

A lease of the City Hospital has been made for \$1.00 a year, and while that institution at present has available space for only 175 beds, this appropriation will be sufficient, not only to provide an addition to the hospital for the necessary 25 extra beds or beds in other institutions, but also to provide modern equipment for operations, etc.

Under the lease agreement, 45 of these beds will be allocated to the city of Little Rock, and the remaining 155 beds will be available to indigents from any part of the state.

This will be a real service to the people of Arkansas, and also will enable our student body to have what they have lacked heretofore, that is, sufficient clinical material to enable them to properly pursue their studies. Our medical school building is second to none in the country, the course of instruction is of high type, and the future of the school is now assured.

EXAMINING BOARD: It has been feared that because of the troubled conditions obtaining in foreign countries, that there might be an influx of physicians from abroad, who might insist on their right to a license by reciprocity, or without examination. Various attempts have been made in some of the eastern states to obtain court orders requiring the examining boards to issue licenses under those circumstances, and in order to avoid this embarrassment, the legislative committee prepared a bill, vesting authority in our examining board to use their discretion in issuing or refusing to issue a license to those who are not American citizens. When

an applicant possesses the necessary credentials, but is not an American citizen, our board may now reject the application or may grant it, according to their discretion. That this discretion will be wisely employed, we can have no doubt, with the long history of faithful and efficient service which our boards have made.

OTHER LEGISLATION: No less than 10 bills were introduced on the subject of workmen's compensation, all of which received the careful scrutiny of this committee. While the one which was approved by the governor may not be all that we desire, so far as the medical section is concerned, the legislative committee thinks it will work out fairly well, and if it does not, of course, we can ask that it be properly amended two years hence.

It provides that a medical board be appointed by the compensation commission to consider the cases, where there is doubt as to the proper award to be made by the commission; and in cases involving occupational diseases, to investigate these cases.

The next Legislative Committee should carefully observe the operation of this law during the next two years, and State Society should be invited to call the committee's attention to anything that you believe may be amiss, or that works a hardship on the practitioner of medicine.

Very many attempts were made to pass new laws, to repeal or injuriously amend some of the excellent laws which have been enacted for the benefit of our profession, and the people of this State, within the past 10 years. Among these were:

S. B. 77 (Abington) "To reduce the high cost of medical care by fixing minimum fees of physicians and hospitals."

S. B. 284 (Coleman) Repealing the statute of limitations as to malpractice suits.

S. B. 293 (Abington) Another bill to reduce the high cost of medical care.

S. B. 304 (Abington) To provide for the regulation of medical and hospital associations.

S. B. 367 (Smith of Monroe) To regulate the expenditure of Federal, State and tax funds paid for medical care.

S. B. 401 (Coleman) To regulate the practice of medicine and to provide relief for those suffering from disease.

H. B. 366 (Rozzell) To create a state hospital board, prescribing its duties and powers. This bill would have placed the regulation of hospitals under the control of the irregulars.

H. B. 403 (Gibson of Carroll) "To grant licenses to practice the healing art under reciprocity." This bill would have made it mandatory on the boards to issue a license to any applicant who held a license granted in another state. The author lives in Eureka Springs.

H. B. 434 (Bains of Jackson) To repeal the statute of limitations relating to actions of malpractice.

In addition to the above, there were many bills affecting our profession in one way or another. For instance, 2 bills regulating the practice of optometry; various cosmeticians bills; various marriage bills; various bills relating to the care of indigent sick; bills regulating hospitals, other than those mentioned above; all of which had our careful attention.

We appreciate the privilege of having been permitted to serve our profession, and hope our efforts were reasonably successful.

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION TO THE HOUSE OF DELEGATES

W. B. GRAYSON, Chairman

The Committee on Health and Public Instruction desires to submit the following report:

1. We are glad to report that no epidemic of any proportion has occurred in Arkansas since the last meeting of the state medical society.

2. We congratulate the physicians of Arkansas on the more prompt and complete reporting of their birth and death certificates. We urge that careful attention be paid to the complete filling out of these certificates, in that every question is answered, which will relieve the state health department, bureau of vital statistics, of writing the physician for additional information. Morbidity reporting could be improved upon, because statistics show that there are more deaths from certain causes than there are number of cases of this disease reported.

3. The sanitary conditions of communities over the State have shown steady progress in improvement, and although there is much work yet to be done, we feel that Arkansas is in line with other states of the Union in their development of sanitation of the environment. We believe it the duty of every physician to advise his patients with reference to sanitary conditions, especially with reference to safe supplies of drinking water and the prevention of contamination of these public water supplies. Municipal swimming pools are inspected and graded by representatives of the state health department, and we believe it the duty of physicians to inform their patients of the danger of frequenting swimming pools not approved by the state health department.

The milk control program continues to improve steadily, but slowly, and we feel that county medical societies should devote some time and attention to the milk supply of cities and communities with reference to sanitation of dairies, health of dairy herds, safe handling of the milk, and especially the employees of a dairy, emphasizing the danger of an employee who may be a carrier of disease. We feel that this will be of material benefit to the infants of Arkansas, in that they may secure a safer milk supply. The state health department is to investigate different methods of capping milk bottles for report at a later date.

County medical societies could be of material help in emphasizing the importance of sanitary drinking fountains and proper sewage disposal at rural schools. Semi-public places such as garages and other places used for bus stations and stops should be classed as public health problems with reference to water and food supplies and sewage disposal.

4. A study of the services of the state hygienic laboratory by this committee causes us to reach the conclusion that some of the privileges of this service have been abused. Certain requests have been made which do not come under the purview of public health, and in many instances we believe that services should be rendered by private laboratories rather than by the State. Approximately 8,000 Wassermann tests are being run each month by this laboratory, and the increase continues to such an extent that it has become necessary to add an assistant to do this type of work.

Members of the state medical society should inform their patients with reference to rabies and all of its

phases, stressing the point that often it is not necessary to kill the suspected animal, but instead to tie or pen it up for a period of ten days or two weeks for observation. Certainly, when the animal is destroyed he should not be shot in the head, as this destroys the brain to such an extent that it is almost impossible to make a diagnosis of finding negri bodies. Requests for anti-rabic treatments have increased to such an extent that it is quite a financial problem for the State Health Department, and it is the belief of this committee that these requests could be decreased if more information was given to the public about the disease. The state health department will continue to furnish physicians upon written request certain commonly used biologicals for treatment of the indigent.

5. There has been no particular expansion of public health activities in the way of increased personnel, and it is the consensus of opinion of this Committee that each county medical society, as well as individual physicians, should inform the laity more of what the functions of the state health department consist, as well as inform them more about public health measures in general. We believe that from time to time the county medical societies should have an open meeting to discuss certain communicable diseases, as well as other problems of interest to the citizenship of the county.

We believe that each county medical society should cooperate with the county health unit by informing the county judges, mayors, and others, that it is not the function of the state health department to do poor sick relief in any form or fashion. Support from the physicians in this matter will help solve the problem, which is becoming increasingly paramount from the county official's point of view.

6. Malaria control activities were hindered somewhat this past year due to the fact that discontinuation of the division of malaria control became necessary because of lack of funds, although lengthy surveys and studies have been made to indicate that it is one of the chief public health problems in this state. Whole-hearted support of the profession on the early diagnosis and treatment of this disease, coupled with the information and solicitation of the rural people to mosquito proof their homes, will help in a great measure to bring this disease more under control. Drainage of swamp areas for control of this disease must not be confused with land drainage proper.

7. The division of tuberculosis control has visited about thirty-nine of our seventy-five counties, holding clinics in cooperation with the physicians and health personnel of the respective counties. Some 4,400 patients have been examined, and a little over 5% were diagnosed as having active adult type tuberculosis, and about one half of this number fell in the group of far advanced tuberculosis. The majority of these examinations were made on children showing a positive skin reaction. The director of this division welcomes requests for consultations by physicians when in their counties. The committee believes that there should be more pneumothorax machines in the state, which would relieve crowded conditions at the Booneville sanatorium.

8. In the division of syphilis control, the program followed has been outlined by the special committee on syphilis from the state medical society. Diagnosis is made and blood tests are run for all indigents upon request of the family physician, and treatment is rendered by part-time physicians in several cities and counties, who are paid by the state health department for this serv-

ice. Present funds will not allow the expansion of this program, but if the current trend continues, it is hoped that more part-time physicians for treatment of syphilis may be employed.

9. The division of communicable diseases reports the following number of cases as reported to the division by physicians during the year 1938:

Disease	White	Black	Total	Deaths
Anthrax in man	2	2	4	2
Cancer	35	2	37	1138
Chancroid	30	9	39	*
Chickenpox	620	21	641	†
Diphtheria	652	59	711	104
Dog bite	124	14	138	0
Dysentery, amoebic	25	3	28	}
Dysentery, bacillary	441	25	466	
Encephalitis	5		5	9
Erysipelas	45		45	12
German measles	7		7	†
Gonorrhea	1785	760	2545	*
Hookworm	9	3	12	0
Influenza	3202	597	3799	551
Malaria	4105	1375	5480	365
Measles	649	431	6927	88
Meningococcus				
meningitis	28	3	31	14
Mumps	320	22	342	†
Ophthalmia				
neonatorum	6	3	9	*
Paratyphoid fever	10	1	11	0
Pellagra	627	223	850	183
Pneumonia	1369	235	1604	1297
Poliomyelitis	29	5	34	18
Puerperal septicemia	8	3	11	28
Rabies in man	2		2	3
Rocky mountain				
spotted fever	1		1	†
Scarlet fever	537	22	559	8
Septic sore throat	209	10	219	&
Smallpox	228	17	245	1
Syphilis	2958	7488	10446	214
Tetanus	6		6	17
Trachoma	107	2	109	1
Tuberculosis,				
pulmonary	724	185	909	965
Tularemia	113	8	121	†
Typhoid Fever	463	112	575	145
Undulant Fever	23		23	0
Whooping Cough	1429	89	1518	141
Typhus Fever	0	0	0	1
Tuberculosis,				
not pulmonary	0	0	0	38

*17 deaths
†11 deaths
& Diseases of the buccal cavity and adnexa, and of the pharynx, tonsils, ets.—78 deaths. (†115 International Code).

10. The maternal and child health services over the state are being given careful thought and study by the committee on maternal & child health of the state medical society, which meets from time to time with the director of the division of maternal and child health of the state health department. Refresher courses for physicians have been offered as a means of improving this condition, as well as more consideration being given to well baby clinics and correction of physical defects. One of the problems of this field of endeavor is the midwife prob-

lem, which will no doubt be reported upon by the special committee of the state medical society on this subject.

Several part-time dentists have been employed by the state health department to help make correction of dental defects of children over the state.

Continued cooperation between the physicians of the state and the state health department in helping to minimize the communicable disease and public health problems of Arkansas is imperative for the success of any program which will better the health of the citizens, and at the same time inform them of ways and means of preventing certain diseases.

MEDICAL EDUCATION AND HOSPITALS

W. G. HODGES, Chairman

The principal objective of medical education is the preparation of men and women for the practice of medicine. The annual report shows 5,194 graduated last year, 237 of whom were women. Practically all served internship in hospitals and many prolonged their training as hospital residents.

The supervision of medical schools by the A. M. A. Council through reports and personal visitation is a potent factor in raising the standard of medical education. All education is making rapid growth and improvement, and medical education is no exception. To keep pace with medical science and research, it becomes necessary that changes be made and that standards be raised accordingly.

To meet these essentials, educational institutions are occasionally faced with adversities and the manner of meeting these difficulties may be the measure of the worthiness of such institutions.

During the past year Arkansas institutions have measured up in cooperation and determination to meet any challenge in a manner to give us all pride in our ability and hope for the future.

For the first time in the history of the school, the people of the state, the administration, and the medical profession are showing a solid cooperative spirit in the interest of the institution. The committee is unable to state at this time just what reorganization measures are involved but with continued support we feel the results will be satisfactory. Although Dean Vinsonhaler has tendered his resignation, he has worked tirelessly and is continuing to do so, to pass on to his successor a great school with a solid foundation for a greater one. His services are most gratifying. The committee wishes to commend the great interest and cooperation of Governor Carl E. Bailey in lending his efforts in helping to bring the school out of its difficulties. The following statistics will give the scope of work done in the school.

The school employs eighteen full time paid teachers and thirteen part-time paid teachers. There are sixty-eight part-time non-paid teachers. Five students received tuition for assistantships, in various services. There are thirty other full time employees and two part-time.

The biennial appropriation for the school 1937-39 was \$140,000. This has been increased for the next biennial to \$250,000. The school clinic admitted 6,082 new patients last year. A total of 46,426 treatments were given; 2,703 of these were deep X-ray treatments, 10,741 were given for syphilis, 17,288 laboratory tests, 2,979 X-ray plates, 924 fluoroscopic examinations were made and 658 maternity cases were delivered.

The general hospital is affiliated with the medical school but it is not operated on the medical school budget.

HOSPITALS: The annual census of hospitals by the Council on Medical Education and Hospitals revealed that a number of records were broken in 1938 in hospital service.

There was an increase in registered hospitals over the previous year; first time since 1930. Births in hospitals went over the million mark.

The average increase in beds in registered hospitals is greater by 36,832, or about fifty percent more than the average annual gain.

While there was an average gain in hospital beds there was also an increase in idle beds, the average in all hospitals being 195,674, while in recent years it has been 180,000.

That the increased use of hospital facilities has not kept pace with the building program the past year is the reason given for the increase in idle beds.

Besides there being 6,166 registered hospitals, there were at the time of the report 136 new hospitals, with their registration pending, 67 under construction and 185 reported planned and being developed. One person in every fourteen became a hospital patient during 1938. Patients were admitted at the rate of 3.3 per second.

These records are proofs that hospitals have reached a higher standard in development than ever before and that they are becoming more essential in the practice of medicine. While hospitals all over the country have been making advancement Arkansas hospitals are no exception. Much credit for the progress and the high type of service rendered is due to the Arkansas Hospital Association, which at all times lends its efforts toward higher ideals in hospital management, modern facilities in hospitals and, also, their splendid cooperation with the medical profession. By this close contact and cooperation, all standard equipments are being elevated.

The report from the A. M. A. Council shows Arkansas has fifty-nine registered hospitals and related institutions, which is a small decrease over last year. Since Arkansas has about 110 hospitals, that is a little over fifty percent of all hospitals, leaving the other half which perhaps are smaller hospitals and which for various reasons cannot measure up to the requirements of registered hospitals.

More emphasis should be placed on the smaller hospitals since they are in the majority in our state. They serve the same purpose, the care of the patients. The public is demanding more and more efficient service in hospitals, so the smaller ones should strive to meet the demands in better equipment and service rendered.

Good organization is as essential in small hospitals as in the larger ones. X-ray and laboratory equipment should be provided when possible and a graduate nurse should be in charge of the patients. It is only by striving for the best in service rendered, that a hospital can fulfill its mission in a community.

Fourteen hospitals have the approval of the American College of Surgeons, three are approved for internship by the A. M. A. Council.

There are 419 registered nurses and 139 unregistered graduates. Nine hospitals have nursing schools accredited by the State Board of Nurse Examiners. Three hundred

twenty students are enrolled, with a graduation class estimated at 150 this year.

COMMITTEE ON PUBLIC RELATIONS

W. T. WOOTTON, Chairman

Your committee can see that at some future date the Public Relations Committee shall assume importance possibly second only to that of the Legislative Committee. We think that the true facts of medicine must of necessity be presented to the people in a way whereby they can judge the truth of statements pertinent to their health.

It would seem to this committee that the most plausible plan for combating the fallacious statements of the radio advertisers, and other proponents of misleading medical propaganda, is to meet them with a true and unadulterated statement of facts as oft repeated as necessary to neutralize the poisonous emanations from these sources.

It is not enough to tell a fellow that a vasectomy is a poor substitute for a waning gland or that it will not reduce the hypertrophying prostate. They must be told the facts of hormone absorption and their possible indirect action on the endocrine system. They must be told why it is a \$50 operation instead of a \$500 one.

Your committee does not think this and other medical evils may be cured by the enactment of laws. We are not impressed with the idea of legislating health. We are concerned with the idea that we, as a medical body, have something the body politic at large is in vital need of. But how to get the knowledge to them that we do possess something they so greatly desire is, at present, our stumbling block.

This committee set a precedent a few years ago and was so encouraged over the outcome last year that we followed it again this year. Our so far successful plan is to let the society's secretary do all the work. Last year we thought he might be assisted in the preparation of articles on timely medical topics by numerous members of the society over the state. Up to the last report not a single doctor responded to his request for an article. This attitude on the part of our members accounts for our opening statement that this committee may assume importance at some future date. At present it is apparent that we, as a whole, do not take the encroachments of pseudo-medical teachings and practices as a serious menace to our future happiness. At least we are unwilling to strenuously do anything about it.

We think the items now appearing once a week in newspapers over the state, a gain of 10 papers during the year, dealing with some imminent medical problem in the home, is an excellent entering wedge. We are not hopeful that this means of disseminating our message is sufficient unto the needs. We, therefore, respectfully recommend that our council take consideration of the question of progressive propaganda for the state society and outline the scope and the means of its delivery.

We want to repeat a statement and request made last year, and apparently with good results. If your home paper does not carry the items prepared and sent out each week by our secretary the fault, if any, lies with the local doctors in that town. Persistently reminding them of their non-cooperative spirit with organized medicine has finally won over some recalcitrant papers.

Keep up your efforts, the training will stand you in good stead when the time comes for you to do big things to preserve the life and honor of organized medicine.

COMMITTEE ON MEDICAL ECONOMICS

J. G. GLADDEN, Chairman

The Committee on Medical Economics submits the following resolutions:

I. That a fund be established by the state and federal government to provide proper medical and hospital care for indigent and low wage groups. That there be reasonable fees required for this hospital and medical care. That the patient be permitted to choose his own physician and hospital.

II. That the government erect hospitals in those places where no other hospitals are available. That the government refrain from erecting hospitals in competition to already established hospitals.

III. That no plans for medical care should now be advocated which would effect the patient who is financially able to pay his bills in case of sickness. That the private practice of medicine be left alone. Its principles and ethics have stood for hundreds of years despite organized propaganda of criticism. The medical profession is one of the most honorable and respected of professions.

That those in the profession through the medical organization as a whole, as well as lesser committees, should continue to study the various plans of social medicine being offered in order to meet the new trends intelligently and wisely.

Necrology—Chairman Evans announced that the annual Memorial Services would be conducted at the Presbyterian Church May 9th at 8:00 A. M.

REPORT OF COMMITTEE ON CANCER CONTROL

FRED H. KROCK, Chairman

Your Committee on Cancer Control has little additional to report at this time over the report issued in 1938. No notable advances have been made either in diagnosis or treatment. Work on agglutination reactions, and intra-dermal skin tests is still experimental, and far from clinical perfection. A great amount of work is being carried on to develop a differential stain to make the histological diagnosis easier and more certain but without success at present. At the present time surgery, radium and x-ray constitute our armamentarium in the fight against cancer. The neutron ray is still promising but remains in the experimental stage. The trend of modern opinion is that very little is gained practically in the usage of voltages above 200,000 in deep x-ray although an increasing number of 1,000,000 volt machines are operating daily.

The death rate for Arkansas from cancer in 1938 was 113.8. Our state is in the lowest bracket, namely 75 per 100,000 of population while the average of the country at large is 110.

The great problem in cancer control; namely, education of both ourselves and the laity in the early diagnosis of cancer, is still as pressing as ever. Such a program should be carried out vigorously by every means at our command, such as the wholesale distribution of informative pamphlets, exhibits, lectures, lantern slides, moving pictures, articles in magazines and daily papers, and radio talks. We in Arkansas are sadly handicapped in carrying out such a program by lack of funds.

In our previous report we endorsed the Woman's Field Army as the logical agency to help us obtain these needed funds. We were fortunate in securing the cooperation of our Auxiliary by their sponsorship of this organization. Unfortunately their efforts were largely nullified by organized opposition from certain quarters by a group sponsoring a movement for the centralized treatment of cancer. Since Arkansas is rather well equipped by a wide distribution of adequate deep x-ray and radium facilities, as well as with surgeon capable of handling malignancies, it does not seem to us that much could be accomplished by such a centralized treatment of cancer in lowering the death rate, particularly since the majority of patients coming to us for treatment of this disease, are still hopelessly advanced. An active educational campaign should materially increase the number of cases in which treatment should be curative.

We as doctors must be educated toward the early recognition of cancer. Only too often do we see far advanced carcinoma of the cervix which has been treated for "change of life," and rectal carcinoma treated for hemorrhoids. A number of other states are publishing a cancer manual for free distribution among the medical profession as an informative guide. In many cases the cost of these manuals is met by funds collected through the Women's Field Army, while in others it is paid for out of funds from the state board of health. In our opinion, such a project is very much worth while. It would require approximately \$500.00 for such work in our state. 1000 members in the Women's Field Army would provide ample funds.

Public opinion, as well as the trend toward socialized medicine will soon result in there being forced upon us a state or federal government control of a cancer hospital with branches throughout the state. The last session of the legislature has given us a taste of this.

If the Arkansas Medical Society wishes its committee on cancer control to be a committee other than in name only, we humbly suggest the following program:

(a) Increase the number of members on the committee from three to five, two new members being appointed each year. Those members retired each year may be eligible for reappointment if desired.

(b) Active prosecution of the following long range program in cancer control:

1. Educate physicians through cancer programs at county meetings. The general practitioner must be "cancer minded" and particularly trained to recognize the precancerous cases.

2. Provision of a cancer manual for use by our members.

3. Organization of study groups in hospitals.

4. Solicit opportunities to make talks before lay clubs and small groups.

5. Gather local statistics, mortality rates and five year cures.

6. Distribution of pamphlets to lay groups.

(c). Provision of a fund for the use of the committee in carrying out this program.

DISEASES OF THE HEART

A. A. BLAIR, Chairman

(Read by A. G. Sullivan)

The Committee on Heart Disease has not functioned in a very extensive way during the past year. Individually we have urged members of our county societies to present papers and have open discussions on heart diseases whenever possible, in order to increase interest and knowledge

of the best management of the cardiac, and to acquaint members with the program of the American Heart Association.

Heart disease continues as the leading cause of death, and has been increasing gradually through a long series of years. Its rise to first place in the mortality statistics has been accompanied by a fall in the death rate from tuberculosis, diphtheria and other infectious diseases. If present conditions continue, one in every five of the population living at the age of ten will die of heart disease. As for heart disease, when an individual reaches the age of thirty-five, his probability of dying is, for males, three times, and for females five times that for tuberculosis.

In organic heart disease we have a condition equal in importance to tuberculosis, while the latter condition has been attacked with the greatest courage and with ample funds. The control of heart disease has barely been attempted. The field has been virtually untouched. A splendid opportunity awaits the attack on heart disease. Its prevention is a large and complex problem. However, reduction of infections and correction of habits which may lead to this disease can be accomplished by education and public interest.

We respectfully urge each county society this coming year to set aside at least one meeting especially devoted to papers and discussions on heart disease.

THE STUDY OF MIDWIFERY

H. T. SMITH, *Chairman*

Of the secondary practitioners the midwives are the most numerous. The amount spent for this service amounts to \$3,000,000.00 per year. The dictionaries say that the terms obstetrics and midwifery are synonymous but I would draw a distinction between them. For many centuries the midwife reigned supreme in her field, and only on rare occasions did the surgeon-physician intrude—and then his accomplishments were not praiseworthy.

Hippocrates, whose mother was a midwife, and the son of a line of physicians, knew very little about childbirth. He though the child somersaulted into a vertex presentation, at about the seventh month of pregnancy, and every month braced his feet against the fundus uteri and tried to leap into the world. Though his knowledge of the mechanism of labor was little and faulty, he organized midwife teaching and gave a classic description of the death from puerperal peritonitis.

For many centuries men were forbidden access to the birthroom and had to get their knowledge of birth from animals.

Astonishingly, as late as 1825, a man-midwife was denied admission to the Royal College of Surgeons, and his friends would not be seen shaking hands with him on the street. Queen Victoria had midwives for her earlier labors. In 1850, when Dr. White of Buffalo delivered a woman before a class, he was denounced by the press and his own profession, and tracts were circulated declaring that "the employment of men to attend women in childbirth is unnecessary, unnatural and injurious."

The United States has approximately 47,000 midwives who attend nearly 15 per cent of the childbirths in this country. The casual character of midwifery in many communities and the fact that many states exercise no legal control or supervision over midwives render the collection of data on these practitioners extremely difficult. Reliable records of midwives are kept in some

states, in others data are deficient, and in others statistics are entirely lacking.

In Arkansas in 1930, 70 per cent of the negro births were attended by midwives, whereas only 6 per cent of the white births were so attended.

Midwives in the rural United States are all much alike, except that some are worse than others. The extent of their practice varies from place to place. They may attend from a few to 75 per cent of all births, even higher in some localities. In studying the problem, the health officer should attempt to locate and register all midwives, recording name, address, age, color, training, length of years in practice, average number of births attended annually, and whether practice is with native white, negroes, or foreign-born population. If and when he finds it necessary to go further into the situation, other data may be obtained: general health, freedom from syphilis, tuberculosis or other diseases of a communicable nature; literacy, degree of intelligence, compliance with requirements as to reporting of births, installation of prophylactic into the eyes of newborn, knowledge of aseptic necessities, and judgment or lack of judgment as to when the physician should be called.

One could go on at great length citing descriptions of the southern midwife and her work, but there is no need to labor the point. Dr. Walter Edmond Levy concisely sums up the situation when he says:

"... Among the negroes conditions are impressively bad, akin to those pictured by Katherine Mayo in *Mother India*, a country not recognized on a par with our civilization. The negro exponent is in nine cases out of ten, old, illiterate, superstitious, and bases her methods upon the traditions of her race teaching, with a total disregard of scientific procedure, or of sterilization. The midwife of this generation, though cleaner, more efficient, and steeped in parrot-like knowledge of the rules and regulations laid down by the Department of Health, can seldom be detached from an inherent superstition, and faith in antiquated remedies. . . .

"In the rural districts of the United States the midwife fills a vital need, but is actually doubly dangerous due to the scarcity of physicians in these regions. She fulfills a mission of comfort to the new mother many miles from the rest of the world, yet her not infrequent ignorance may be the means of wrecking that same mother's and child's lives."

Training and Supervision of Midwives

In spite of the fact that the continued existence of the midwife under present conditions is recognized as necessary, facilities for her training are hopelessly inadequate. But two or three approved schools of midwifery have been operated in the whole United States. One of these is the Bellevue School of Midwifery, conducted in connection with the Bellevue Hospital in New York City. Most of midwife training has been in Philadelphia and New York.

All those who have given any thought to the present problem agree that there is an immediate need for more midwifery schools. The Committee on Prenatal and Maternal Care of the White House Conference on Child Health and Protection has given as its recommendation:

"Recognized institutions for the training of midwives, which would assure preliminary education and proper training, must be established if present conditions are to be permanently improved. The establishment of such institutions is a local responsibility. They should be

located in sections needing the services of midwives and where they will not conflict with the obstetric teaching work of medical schools. It is felt that midwives trained in or near their own communities will be more likely to stay in those communities where their services are needed.

"Inasmuch as the need for midwives seems greatest in those communities having a large colored population, it would seem wise to establish institutions for the proper training of colored midwives in the South where a wealth of controllable clinical material is available.

"There should be provision for courses for keeping midwives up-to-date."

In the South:

"... Nurses, and occasionally doctors, have conducted courses for midwives in which theoretical instruction has been given; the oldest, most ignorant and unfit of the colored midwives have been eliminated from practice, and the requirements for a permit or license raised. Work of inspection or supervision has been begun or extended. In some instances younger and better educated women have been urged to attend the classes, so that they might replace some of the older and less qualified ones. The courses of instruction have consisted of only a few lessons in some instances, and in others have been more extensive. In Georgia and South Carolina practically every midwife in the state has had the advantage of a short course of lessons. In some places, however, a midwife program has been conducted in only a few counties. In South Carolina, during two successive summers, one-month courses of combined practical and theoretical training were conducted at a hospital connected with a colored school. Many colored midwives took advantage of this opportunity for a real course in midwifery, brief as it was. In Kentucky a course in midwifery was given at a small hospital located in the mountain section, and one class graduated. Lack of funds prevented continuation of the course. Two national organizations which have assisted in this midwife educational program by lending physicians to conduct midwife classes are the American Child Health Association and the Federal Children's Bureau."

Reasons for Employing Midwives

Three main reasons account for the demand for the services of midwives: the higher cost of physicians' services, the scarcity of physicians in rural districts and habit and tradition. The last factor is sometimes independent of, and sometimes a result of, the other two.

The health office of a sparsely settled southwestern state puts the situation as follows:

"We must accept the midwife and attempt gradually to improve her practice. Fewness of physicians and distance people live from them make it impossible for a large part of the population to employ them because (1) they are not to be had at any price, and (2) because people cannot pay the fees. A trip of 100 miles at a dollar mile plus the regular obstetric fee would consume more than the entire cash income of a family for a year in many cases. The midwife in this state is an institution dating from prehistoric times. Any attempt to curtail her activities arouses a storm of protest from the Spanish-speaking population which comprises about one-half of the total."

As part of the investigation of the midwife situation in Texas, women were questioned as to why they had called in a midwife. Typical answers follow:

"Had midwife because could get her for 75 cents, doctor cost \$15.00."

"Molly was closer and doctor higher. Did my washing and charged \$5.00. Really worth more."

"We folks always do have midwives."

"Had midwife because ashamed to have man at that time."

"Never had time to get doctor. Baby comes so fast."

"Had midwife because I lived so far in the country and doctors would charge so much for the trip."

"Had midwife because I get them so much cheaper than a doctor. They take more pains with you too."

These answers were given by white, colored and Mexican women.

"All of our studies (wrote the late Dr. J. Osborne Polak) go to show that the obstetrics of our country is improving in the rural districts by the reduction of infection and eclampsia, but that the mortality from all puerperal causes is kept high by the tendency to interrupt the normal course of labor by time-shortening methods of operative nature resulting in deaths from anaesthesia, shock, embolism, peritonitis and hemorrhage. These in many localities counterbalance the gains made by aseptic conservatism."

At the White House Conference on Child Health and Protection, Dr. J. H. Mason Knox, Jr., Chief of the Maryland Bureau of Child Hygiene, said:

"How can you expect them (physicians) to avoid the use of drugs to hasten labor when called to a case if they know they have another case perhaps 20 miles or 100 miles away which is coming off in a few hours? That necessitates almost either the use of drugs or the use of instruments. We all know that a large part of our maternal mortality follows operative interference.

"It seems to me, one thing we need in this whole program is patient waiters by the bedside of these mothers who are normal. Doctors are not patient waiters and they cannot be under rural conditions such as we have now. We need someone who will represent the doctor, who will be clean, who will take care of the mother, help to provide for taking care of the child and sit by that bedside until nature takes its course."

"I believe (states Dr. B. P. Watson, of the College of Physicians and Surgeons of Columbia University) that the maternal mortality in this and in every other country would be very materially reduced if the practice of obstetrics were in the hands of thoroughly trained midwives working in conjunction with and under the direction of properly trained doctors.

"Or to put it another way, every doctor practicing obstetrics should have associated with him one or more trained midwives who would conduct the delivery of his normal cases

"I believe that such a system would work out not only to the benefit of the patient, but to the economic advantage of the doctor. To the latter would belong the whole responsibility of prenatal care and the determining of the ability of the patient to go through a normal labor. He would be called upon if any difficulty arose in labor, if any injury required repair, or if any complication arose in the puerperium. He would examine for and correct any abnormality, such as a retroversion, two or three weeks after delivery. This is not theory, it is being worked out in practice. One Scottish doctor informed me that since he conducted his work in this way,

he has reduced his operative deliveries to 3 per cent, he has fewer puerperal complications, he has time for reading and attendance at medical meetings, which he never had before, and he is financially better off."

Dr. Joseph B. D. Lee, says:

"With present knowledge and present means there is only one place where operative intervention can improve on nature in normal delivery and that is in preventing damage to the pelvic floor. In all else it is safe to guide the labor along natural channels until dystocia becomes threatening or immediate.

Letting a woman pound the head on the pelvic floor for hour after hour is midwifery by omission.

Doing routine version and extraction is meddlesome midwifery, unscientific and pernicious.

Blasting the baby through the birth canal with solution of pituitary is meddlesome midwifery, unscientific and pernicious.

Cecarean section selected properly may be the finest kind of obstetrics, comparable to a scientifically conducted normal labor, but as it is performed today it is often an exhibition of the lowest obstetric intelligence, of which even a midwife would be ashamed. In the fifteenth century, midwives did cesarean sections."

After a study of 5,000 childbirth cases, Dr. W. C. C. Cole of the University of Detroit reported that the chances of delivering a perfect baby "decreased almost uniformly in ratio to the amount of drugs administered." Pain-killing drugs given to mothers in labor, he declared, tend to paralyze the breathing centers in unborn infants; the near-suffocation which results may produce epilepsy, insanity or other complications, during later life.

The midwife problem in our state has been under the supervision of the State Board of Health for a number of years. The midwives permitted:

Year	White	Colored	Total
1935	58	546	604
1936	59	551	610
1937	84	621	705
1938	125	757	882

AVERAGE NUMBER OF LIVE BIRTHS REPORTED WITH THE PERCENT ATTENDED BY MIDWIVES, PARENTS, AND OTHERS
5 Years, 1933-1937

		Total Births	Percent Midwife	White Births	Percent Midwife	Negro Births	Percent Midwife
State	Urban	4,927	10.5	4,017	1.6	910	50.0
	Rural	30,559	32.5	23,107	14.9	7,452	87.2
	Total	35,486	20.5	27,124	12.9	8,362	83.1
1.	Crittenden	688	84.0	119	27.7	569	95.8
2.	Lee	480	80.5	170	49.1	310	98.1
3.	Desha	413	77.6	129	32.3	284	89.2
4.	St. Francis	616	68.1	204	21.0	412	91.7
5.	Chicot	412	67.2	170	26.5	242	95.9
6.	Lincoln	409	66.7	141	12.8	268	95.1
7.	Jefferson	1,080	61.7	409	9.0	671	93.6
8.	Monroe	411	61.1	187	19.8	224	95.5
9.	Stone	199	59.3	199	59.3	-	-
10.	Lafayette	223	57.4	88	18.2	135	83.0
11.	Phillips	796	56.9	285	14.7	511	80.4
12.	Ashley	615	52.0	328	25.0	287	82.9
13.	Woodruff	342	50.9	173	21.4	169	81.1
14.	Cross	405	49.9	244	22.9	161	90.7
15.	Little River	237	49.8	151	23.8	86	95.3
16.	Drew	452	49.3	255	16.1	197	92.4
17.	Newton	330	48.5	330	48.5	-	-
18.	Lonoke	580	45.9	371	18.6	209	94.3
19.	Searcy	259	45.6	259	45.6	-	-
20.	Ouachita	544	44.7	265	6.8	279	80.6
21.	Madison	307	44.3	307	44.3	-	-
22.	Hempstead	596	41.1	345	5.5	251	90.0
23.	Calhoun	176	40.9	117	20.5	59	81.4

24. Columbia	336	40.8	177	6.2	159	79.2
25. Prairie	300	39.3	216	18.5	84	92.9
26. Clark	376	38.6	247	9.7	129	93.8
27. Nevada	256	36.3	166	6.6	90	91.1
28. Mississippi	1,819	31.1	1,320	10.4	499	85.8
29. Conway	524	30.9	380	13.9	144	75.7
30. Dallas	241	30.3	158	6.3	83	75.9
31. Howard	331	29.9	228	5.3	103	84.5
32. Van Buren	242	29.3	239	29.3	3	33.3
33. Cleveland	233	26.2	184	12.0	49	79.6
34. Montgomery	185	24.9	184	25.0	1	
35. Jackson	637	24.8	558	17.0	79	79.7
36. Bradley	350	22.0	237	5.5	113	56.6
37. Marion	193	24.3	193	24.3		
38. Union	652	24.2	471	4.9	181	74.6
39. Cleburne	277	23.1	277	23.1		
40. Arkansas	328	22.3	271	8.9	57	86.0
41. Baxter	194	22.2	194	22.2		
42. Carroll	320	20.6	320	20.6		
43. Johnson	407	20.4	400	20.4	7	
44. Pike	196	19.9	182	16.5	14	64.3
45. Crawford	527	19.7	509	18.7	18	50.0
46. Miller	438	19.4	349	3.7	89	80.9
47. Sevier	318	19.2	281	12.4	37	70.3
48. Independence	532	17.5	518	16.4	14	57.1
49. Pope	558	17.0	544	15.8	14	64.3
50. Hot Spring	371	16.7	327	8.3	44	79.5
51. Faulkner	551	16.5	478	8.4	73	69.9
52. Poinsett	758	16.0	667	7.0	91	81.3
53. Pulaski	2,113	15.7	1,481	2.4	632	46.8
54. Izard	256	15.2	253	15.0	3	33.3
55. Randolph	358	14.2	356	14.0	2	50.0
56. Washington	786	13.6	776	13.8	10	
57. Sharp	237	13.5	236	13.1	1	100.0
58. Fulton	225	13.3	225	13.3		
59. Garland	610	12.9	574	11.3	36	38.9
60. Perry	170	12.9	163	11.0	7	57.1
61. Scott	277	12.6	273	10.8	4	
62. White	659	11.7	641	10.8	18	44.4
63. Clay	597	10.5	597	10.5		
64. Grant	229	10.5	208	5.3	21	61.9
65. Saline	356	8.4	349	8.0	7	28.6
66. Boone	291	8.2	291	8.2		
67. Franklin	357	7.8	349	7.7	8	12.5
68. Yell	327	7.6	316	7.3	11	18.2
69. Lawrence	468	6.4	464	6.5	4	
70. Benton	664	5.9	664	5.9		
71. Polk	330	5.8	330	5.8		
72. Logan	525	5.1	515	4.5	10	40.0
73. Craighead	992	4.9	973	3.6	19	73.7
74. Green	553	3.8	553	3.8		
75. Sebastian	1,072	2.0	1,012	1.4	60	11.7

1937—	
Midwives not permitted	1,166
Births reported	5,029
Midwives permitted	705
Births reported	4,177
Total	9,206

Maternal mortality rate for 1937 in the United States shows Arkansas 68 per 10,000; Louisiana, Mississippi, Georgia, South Carolina and Nevada, 70 or more per 10,000; all other states show lower death rates. Arkansas was only state in the United States showing higher maternal mortality rate for 1936 and 1937 as compared to 1934 and 1935.

COMMITTEE FOR THE STUDY OF NEED AND SUPPLY OF MEDICAL CARE

A. S. BUCHANAN, Chairman

Your committee for the study of need and supply of medical care, which was requested by the American Medical Association, desires to make the following report:

Six meetings of the committee have been held, various members of the Arkansas Medical Society contacted and about 500 letters written to secretaries of county societies throughout the state.

The study embraces 31 counties comprising a population of 910,235 or about 50% of the total population of this state. The population of the individual counties ranges from about 6,000 in Cleveland county to about 137,000 in Pulaski county.

As to distribution, the study embraces reports concerning 877 doctors, whose practice covers an average area of 11 1/3 miles; 190 dentists; 50 hospitals; 197 private duty nurses; 52 public health and visiting nurses;

27 health departments; 30 relief and similar agencies; 14 schools; 6 colleges, and 4 other organizations. The study is not drawn from the personal reports of these 877 doctors, 190 dentists, etc., but from what **some** doctors and agencies said not only about themselves but also what they said about a large number of other doctors, nurses, hospitals, agencies, etc. Of 118 full-time and 79 part-time nurses a report was received from only 34; of 39 full-time and 3 part-time public health nurses, reports were returned by 19; of 341 pharmacists in the area studied, 242 received blanks and 78 returned them; in this area there were reported to be 50 hospitals, of which 44 received blanks and 17 returned them.

There were 4,093 hospital beds reported in this area, and the average rates ranged from \$3.00 for ward rooms to \$5.00 for private rooms.

Eighty clinics were reported, 69 of which render special service, and there is a total of 27 health departments. Private agencies number 34 and governmental agencies 31. Named also were 154 other agencies which supply limited medical care.

The total number of schools below-college level having health supervision which reported was 111; the number of schools with health supervision service under the control of the board of education, 8; under the health department, 32. There are 7 colleges which have health supervision.

Sixty eight organizations arrange for or provide medical services for special groups of persons.

In the area studied a total of 107,079 persons was reported as having received free care by physicians and 5,667 reported free care by dentists.

Physicians devoted 14,391 hours to free ambulatory patients during the year 1937. Dentists reported 900 hours.

There were 23,908 pay or part-pay patients reported by hospitals for 1937, 20,165 public charges and 7,635 free patients. Physicians referred 791 patients to hospitals for free care, relief and other agencies referred 580, and other organizations and agencies referred 227. There were 249 direct applications. There were 167,122 pay and part pay patient days reported, 15,007 patient days for public charges and 25,538 free patient days.

Totals of 12,329 patients and 29,952 visits were reported for out-patient departments in hospitals.

A total of 7,381 visits by nurses was reported made, all of which were free.

Reports showed 15,158 free prescriptions compounded by pharmacists and 12,248 prescriptions compounded at cost or reduced rates.

Patients numbering 1,792 needed hospital care but did not receive it, it was reported. Of this number not admitted to hospitals, various reasons were given: not able financially, no hospital in area, religious objections, unworthy, ineligibility, assistance given at home by county, state, welfare, etc.

The number of persons visited by nurses who were not being visited by regular physicians amounted to 3,037 from three counties. The greatest part of these visits were made by state health nurses. There were only 125 people in this area reported to be unable to obtain medical care.

Nursing services were required by the following numbers of people for the conditions which are named: Acute medical and surgical, 1,592 (reports from 10 of 31 counties); chronic medical and surgical, 760 (7 coun-

ties); communicable diseases, 793 (9 counties); maternity, 1,082 (11 counties); health supervision, 2,797 (7 counties); all other conditions, 233 (6 counties).

In the same year, 1937, 15,198 persons from 11 counties requested medical care from the health department, and the health department reported in 3 counties 325 instances where requested medical services could not be obtained, while 820 persons in 20 counties were reported to the health department as being in need of medical care which they were not receiving.

Elementary or secondary school pupils numbering 7,700 from 9 counties were reported to be in need of medical care, and 1,518 from 5 counties of these pupils were unable to secure such recommended care.

Physicians or dentists reported 83 instances in 8 counties where medical services could not be obtained.

A total of 215 persons from 6 counties included in this area was unable to obtain either medical, dental, nursing or hospital care.

Performance of preventive medical services was reported by 441 physicians in private practice in 26 counties, by 87 physicians for the health department in 23 counties and by 96 physicians for other agencies in 10 counties.

The percentage of births unattended either by physicians or midwives amounted to 15.9% in 21 counties, while 25% of each 1,000 children born alive in 1937 were reported immunized against diphtheria. This number was reported from 22 counties. In 26 counties 53.22% of all reported obstetric patients waited until after the third month of pregnancy to consult their physicians.

Twenty five counties reported 76.2% of the children who entered school for the first time in 1937 were successfully vaccinated against smallpox.

Vital statistics for the latest year of complete returns showed the following figures: Birth rate, 19.4 (16 counties);

Death rate; 9.4 (16 counties); maternal mortality rate, 8.3 (13 counties); diphtheria mortality rate, .4 (8 counties); diphtheria morbidity rate, .7 (8 counties); infant mortality rate was undetermined.

Two counties showed decreases in the number of sales of medicine on physicians' prescriptions for the year 1937, as compared with 1936, in relation to the number of home remedies or patent or proprietary remedies. Fifteen counties showed increases. Eleven pharmacists from 7 counties reported decreases; 54 pharmacists from 16 counties reported increases.

STUDY OF COUNTY SUMMARIES

A summary of the study of need and supply of medical care can only be made in the most general terms and even then there is wide risk of presenting an erroneous picture of the adequacy of medical care in Arkansas. I believe that an accurate study of the type indicated by the detailed nature of the individual and county question blanks would require the undivided service of an expert over a period of perhaps a year. Few records of the care of indigent persons are kept and for this reason it was almost impossible for physicians to record wholly dependable reports of the number of persons who should and do secure adequate medical care. Matters were further complicated by the varied interpretations which responding physicians placed upon questions, resulting in such a mass of discrepant figures that the summary sheet in many instances is more of a puzzle

than a digest. With this in mind I have summarized conclusions rather than figures because I believe it is better to assimilate accurately what the doctors themselves think than to posture a deduction based on discordant figures.

On the whole the doctors of Arkansas believe that the improvement of medical care for the people of their state requires two steps. The first is the securing of funds so that the care of the indigent sick will be removed from their shoulders, where it now rests almost entirely, and, with other social responsibilities, placed on the public as a whole. The second is the direction of these funds by those best equipped to dispense them, the medical profession.

The opinion that some financial provision be made for the care of the indigent sick appears to be almost unanimous. With this the dominant thought of the summaries I assume that the doctors believe one of two things, either that financial provision should be made because medical care now falls far short of adequacy and they would like to see that condition remedied, or they hope to secure some help in the already adequate care for which they alone are now responsible. One thing is obvious, that it is the indigent of Arkansas for whose medical care the state's doctors are concerned. For those with adequate incomes no change in the medical status quo is necessary. Provide the indigent with a reliable financial source, say the doctors of Arkansas, to which they can turn not only for emergencies but also for routine preventive services, and the problem of adequate medical care in this state will be solved.

Few of the county summaries made specific mention of the viewpoints of pharmacists, dentists, nurses and hospital authorities, and in order to keep this report as brief as possible I will not summarize those few statements which were made except to say that pharmacists, dentists and hospital authorities, wherever they are mentioned, concur with the opinions voiced by the doctors.

One other fact is clear, that the doctors feel that they are doing their best for the indigent sick as conditions now exist and that neither physicians or hospitals can do more for charity than they are already doing.

As to the means of providing funds for the care of indigents, we again find little diversity of opinion. Several counties strongly recommended the methods of the Farm Security Administration but almost unanimously those who favor this plan say there is far too little money behind it as it now stands. Others recommend the public welfare plan, with the same criticism, and one county makes three different suggestions: Health insurance for low income groups; taxation of the population for medical care of the indigent, and provision and maintenance by the county of from five to ten beds for indigent cases.

The control by the medical profession of public or group funds for care of the indigent, which is the second step suggested for the improvement of medical care, is not brought out with either the unanimity or the emphasis of the first step. Few of the county summaries go beyond a discussion of the financial needs of their counties, but those who do proceed with a plan for control of funds after these are obtained are vigorously opposed to any plan of control in which politics might become involved. I believe I may even say that some believe the first step should be conditional on the second; that is, that no financial provision need be made unless a medical, non-political body is placed in charge of it. They believe that organized medicine is the logical

agency for the direction of any medical program which the government or any other group may tender to the public. They believe too that if any such plan is worked out, the patient should be free to select any physician or any hospital he wishes. Only one county made any suggestion regarding the classification of indigents. The reporting physician proposed that the government maintain a separate organization for this purpose.

In conclusion let me point out a significant observation, mentioned by only one county in these summaries but touching a phase of the question of adequate medical care which must be faced before the problem is solved. This is the matter of public indifference, for which the indigent cannot be held wholly accountable because it permeates every stratum of society. This single physician states that efforts to provide sanitation and immunization are in many instances resented. He says that smallpox immunization is one hundred per cent in his county only because it is a state requirement for admission to the public schools.

On this question, gentlemen, hangs the real fate of advanced health practices for our nation, and it is a problem which no program of finance or politics or medical facilities will solve. It is a problem of education, which, after all, is the initial step in any medical program which honestly redounds to the public weal.

S. W. Douglas presented the following supplementary report to that of the Committee on the Need and Supply of Medical Care:

There are 1850 physicians in Arkansas listed in the Directory of the American Medical Association. Of this number, only 637 are subscribers to The Journal of the American Medical Association.

In Arkansas there are only 391 Fellows of the American Medical Association, this being but 20 per cent.

Of those who receive The Journal of the American Medical Association, Arkansas has a percentage of 34. This is the lowest in the United States, Mississippi excepted, with a percentage of 29.

Of the 1850 physicians in Arkansas, 1070 belong to the Arkansas Medical Society, a percentage of 58; 42 per cent not being members.

Out of the 75 counties in Arkansas, 11 have no county medical organization.

Out of the 75 counties, only 31 completed reports for the survey.

Of the 1850 physicians in Arkansas, only 384 returned complete reports in the survey. This is only 15 per cent, 85 per cent not being interested.

The excellent postgraduate courses being given at Little Rock show an average attendance of 130. This gives a 7 per cent attendance, 93 per cent not being interested. This amazing indifference is a problem that should receive serious consideration of the state society.

REPORT OF MATERNAL AND CHILD WELFARE COMMITTEE

S. A. THOMPSON, Chairman

With the aid of the state health department and Maternal and Child Welfare Bureau of Washington, this committee put on a refresher course in pediatrics in Texarkana, Camden, Pine Bluff, Forest City, Conway, and Fort Smith. This series began May 16th, 1938 and continued for six consecutive weeks on the circuit plan.

Dr. Cook of the Pediatric Department, Washington University, St. Louis, Mo., conducted this course.

With the same aid as before, plans are now complete for a refresher course in obstetrics, by Dr. H. Close Hesselstine of Chicago Lying-In Hospital, beginning May 29th. The following cities have been selected, Prescott, McGehee, Jonesboro, Conway and Fort Smith. This places a meeting in the center and each corner of the state within reasonable distance of most physicians in Arkansas. The state secretary will give you the hour and location of meeting in each town by May 15th.

The number attending the pediatric course last year was very disappointing. Most of those who started at the beginning were so well repaid that their attendance was regular. The state secretary and the committee kept dates of meetings constantly before you. The only excuse for non-attendance was lack of energy or complacency as to ability to look after your Pediatric practice according to modern methods. Our state health officer reports that Arkansas is the only state showing an increase in maternal deaths. It is therefore imperative that we plan to attend these obstetric Lectures regularly. Perhaps we may then be more valuable to maternal health and to this Society. We again urge that you furnish all possible details when occasionally requested by the state Bureau of Vital Statistics regarding maternal deaths. When sufficient material has been collected an analysis will be made and given to us by Dr. Grayson. Perhaps this work may clear us of the above implication in such deaths. We await this report with much interest.

This committee contacted the Commonwealth Fund of New York in an effort to lay the ground work for a full time instructor in obstetrics and pediatrics similar to that now carried on in Oklahoma, Kentucky and several other states. At this time this fund is obligated to its full capacity. They urge that we try, with our own resources, to carry out such a program. It is our suggestion that this committee, or a special one, with the state department of health and possibly the medical school be permitted to work toward this goal.

The motion picture, the "Birth of a Baby", was run July 1st, 1938, in Little Rock for this committee's observation. Members of the council were also present. After viewing this picture our approval for showing it in the public theatres in the state to those age 16 years and up was unanimous, with one exception. This member did not object to the picture, but voted "no" for other reasons. The state secretary issued an official bulletin to every county society regarding this action in July 1938.

The Children's Bureau of Washington, ask and received our approval of their May Day programs as "Child Health Day." We suggested that the state journal give equitable space to this movement.

This committee expresses its appreciation to our state health officer, Dr. Grayson and his assistant, Dr. Smith, and to our state secretary Dr. Brooksher, for their courtesy and aid in carrying on our work.

REPORT OF THE COMMITTEE ON POST-GRADUATE INSTRUCTION

D. A. RHINEHART, Chairman
(Read by the Secretary)

On October 12 and 13, 1938 and again on January 31 and February 1, 1939 were held the fifth and sixth two-day courses of postgraduate instruction sponsored by the Arkansas Medical Society and given under the auspices of its Committee on Post-graduate Instruction.

It is the belief of your Committee, a belief which seems to be shared by many* of the members of the state society, that the programs presented at these courses were more interesting and beneficial than any presented previously. At the first four courses, each day was devoted to intensive discussion of one particular subject. At the last two courses, the programs comprised the discussions of miscellaneous subjects with emphasis placed on newer methods and procedures in medical and surgical practice. At these meetings there were no doubt several presentations of interest to each doctor attending.

One hundred seven doctors registered for the fifth two-day course of postgraduate instruction held on October 12 and 13, 1938. Guest speakers were: Dr. Leon Bromberg, St. Louis; Dr. James S. McLester, Birmingham, Alabama, and Dr. Robert F. Short, Dallas, Texas. The registered attendance at the sixth course held on January 31 and February 1, 1939 was 89. Guest speakers were: Dr. Cyril M. MacBryde and Dr. F. D. Gorham, both of St. Louis.

At each of these meetings the programs were completed by members of the faculty and the different departments of the University of Arkansas School of Medicine and by doctors from over the state. At the last meeting several clinics were held which seemed to be especially well received.

The interest shown in these meetings still is believed sufficient to warrant their continuance. Their financial success has been proven.

The secretary's report of receipts and expenditures is filed separately. The Committee would be glad to have the accounts of the secretary audited.

The members of the Committee on Postgraduate Instruction very definitely believe that these programs are worthwhile and there is a distinct need for them. However, inasmuch as this project is sponsored by the Arkansas Medical Society and is given for the benefit and pleasure of approximately 1150 physicians, we feel that the registered attendance is considerably less than it should be. An investigator for the American Medical Association complimented our programs but said that our average percentage of attendance was lower than at similar meetings held elsewhere. A great deal of effort has been made to increase the attendance at each of the meetings, but our results have been disappointing. The Committee would appreciate suggestions from the House of Delegates as to ways and means of reaching a greater number of doctors with these programs, or devising some acceptable methods of postgraduate instruction that will reach more of the doctors in Arkansas.

During the meeting of the Arkansas Medical Society in Hot Springs National Park, the Committee on Postgraduate Instruction will hold a meeting of its entire membership for the purpose of discussing plans for the future guidance of the Committee. The chairman also is planning to meet the officials of committees on postgraduate instruction of the other states during the meeting of the American Medical Association in St. Louis next week. It is hoped from these that something worthwhile for the future conduct of our committee will be derived.

Auxiliary—No report was received from this committee.

REPORT OF THE COMMITTEE ON SYPHILIS
CONTROL

D. W. GOLDSTEIN, Chairman
(Read by Louie M. Martin)

Your committee early in the year met with the state health officer, Dr. W. B. Grayson, and Dr. A. M. Washburn, director of the department of communicable diseases. The program for the year's work was outlined to us by them, which received the endorsement of the committee.

An educational campaign has been carried on by the Health Department, films have been shown, and numerous talks on syphilis given.

There has been a better system of reporting and better cooperation has been received from the medical profession.

A great increase of cases are shown over 1937. In 1937 there were 1790 white cases reported and 2032 colored, a total of 3822 cases. In 1938 2958 whites, 7488 colored, a total of 10,446 cases. We believe this is due to publicity and also to the follow-up of cases by the health officers. There has been an increase in Federal funds which has made this extensive program possible.

There are at present 46 clinics and hospital dispensaries in the state. Clinics have been established for treatment. No clinics have been established in any community without the endorsement of the local medical society. Patients are treated on the request of physicians. Free drugs are given to physicians for the indigent and the State Laboratory made the following number of serological examinations:

	1938	1937
Syphilis blood Wassermann, positive	14,497	7,202
Syphilis blood Wassermann, negative	57,047	35,479
Syphilis, spinal fluid Wassermann,		
positive	45	23
Syphilis, spinal fluid Wassermann,		
negative	232	171
Totals	71,803	42,875

Again we wish to call your attention to the control of congenital syphilis. This can be done if every physician will take a specimen of blood from every pregnant woman consulting him and submits it to a laboratory to be examined serologically for syphilis. This should be done whether the consultation is early or late in pregnancy as it is advantageous to treat pregnant syphilitic women even late in pregnancy.

Legislation: Last year we recommended to this Society that a law be sponsored preventing the marriage of individuals infected with venereal disease. Such a law was sponsored by the state Parent-Teachers Association before the legislature, but was defeated. It is our hope that before another act is presented the committee on syphilis control will be consulted as well as the State Board of Health. There may be many pitfalls in a law to control marriage, and study should be given such a proposal.

J. Marion Sims in his presidential address before the American Medical Association stated that he would simply "include syphilis in the great family of contagious or communicable diseases, and make it subject to the same laws and regulations that we already have for

their management. No greater theme (than the control of syphilis) could possibly engage the attention of this (American Medical) Association, or of the profession at large. Whatever good is to be accomplished in this matter must emanate from us, and be carried forward by us." What J. Marion Sims stated in 1876 is applicable today.

COMMITTEE ON HISTORY OF ARKANSAS
MEDICAL SOCIETY

FRANK VINSONHALER, Chairman
(Read by the Secretary)

The chairman of the committee on the history of medicine in Arkansas begs leave to report that we have written a description of medicine in Arkansas between 1820 and 1860. There remains to be written a history of the Arkansas Medical Society, which is now in progress of being written. It will be necessary to have the cooperation of the secretary and as many of the ex-presidents as are now living. In addition to this research will have to be done in some of the remote counties of the State.

Let me take occasion to ask that each ex-president make his contribution to the medical history and forward it either to the secretary or to me, where it can be used to prepare a continuous and complete history. Dr. Wootton, of Hot Springs, has already done this, and no doubt his example will be followed by others.

COMMITTEE ON LIASON WITH ARKANSAS
TUBERCULOSIS ASSOCIATION

A. C. SHIPP, Chairman

The Committee on Liason with the Arkansas Tuberculosis Association has had no call meetings during the year because no questions of sufficient import to warrant the expense of meeting have arisen.

The chairman, as a member of the Board of Directors of the Arkansas Tuberculosis Association, has helped in the framing and adoption of the program for the coming year that provides for a more intensive campaign for fighting tuberculosis, the completion of a survey of results of sanatorium treatment in our State Sanatorium, furnishing of tuberculin for test clinics, and assisting in holding same in the counties without health officers, and helping in finding means for administration of pneumothorax treatments in as many counties as possible.

The Tuberculosis Club, recently organized among the patients of the State Sanatorium, primarily has for its purpose the helping of needy patients in the Sanatorium, the establishing of pneumothorax stations over the state, and the furtherance of education of the people in or for the prevention of tuberculosis.

The Tuberculosis Club has or will contact all members of the Arkansas Medical Society concerning their work and the Committee recommends that we give them our cooperation and advice. In the activities of this Club there will no doubt arise questions involving medical ethics and medical economics. We, your committee, therefore recommend that the function of this committee be expanded to include the Tuberculosis Club in the same category as the Arkansas Tuberculosis Association.

REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY

L. J. KOSMINSKY, Secretary

I herewith submit for your approval the action of The State Medical Board of the Arkansas Medical Society since the meeting in Texarkana, April 1938.

There were sixty-seven applicants up before the board in June 1938 for examination, all passing the examination satisfactorily and were issued certificates to practice medicine in the state of Arkansas.

Primary examination fee was returned to one applicant after he failed to pass the Basic Science Board, therefore not being eligible to take the examination, which left twenty applicants for the primary examination, all of whom passed.

After submitting the necessary fee, thirty were certified to various other states the past year.

After having presented satisfactory evidence of graduation from reputable medical schools, and having complied with all the necessary requirements of the law, forty-two applicants were issued license by reciprocity.

Reciprocity fees were returned to three applicants who failed to meet the requirements of the board.

Approximately twenty applicants were received in the office of the secretary during the past year, the applicants being foreigners and graduates of schools that did not meet the requirements of the Board.

I attended the Federation of State Medical Boards of the United States in February 1939, at Chicago, of which your state board has become a member since our last meeting. The meeting was very instructive and enlightening as to the examinations and reciprocities of other boards. I am also glad to advise, that in addition to the number of states with which Arkansas had reciprocal relations, that we now reciprocate with the New York and Colorado.

At a special meeting on December 5, 1938 The State Medical Board of the Arkansas Medical Society met with the Council of the Arkansas Medical Society, at which time the board advised the Council that Dr. J. L. Statler was threatening to enter suit because the board refused to issue him a license to practice medicine in the state of Arkansas.

It has been a practice by resolution of the board since 1924 making it mandatory that the applicants for examination or reciprocity be citizens of the United States. There being a question as to whether this regulation or resolution would hold good in court, there has been inserted in Section F. of the medical law a clause which requires all applicants to be citizens of the United States. This was done through the efforts of your Legislative Committee and attorney.

I regret that the Reference Committee, in our last annual meeting, failed to recommend the idea of annual registration, which is practiced by most of the state boards and also by the eclectic board of our state. Because the board does not have this registration, it is impossible to check up on the number of physicians in Arkansas who are practicing medicine unlawfully. Scarcely a day passes that we do not have an inquiry from the American Medical Association on some physician who is supposed to be located in Arkansas, and many times we are unable to give this information because we do not have a record. We, the members of the board, feel that if registration was in-

augurated, irrespective of the fee, it would enable us to accurately check up on the medical profession in Arkansas.

Dr. Wm. A. Snodgrass, who has served on this Board for the last eight years and as its President for the past two years, will retire, not being eligible for reappointment by law. We, the other members of the board, wish to thank him publicly for his untiring faithful efforts and service and recommend he be given a vote of thanks by the entire society for his good work.

Besides the president, Dr. Wm. A. Snodgrass, there are two others who have served one term of four years each: Dr. W. M. Majors, Paragould, and Dr. L. J. Kosminsky, Texarkana. Dr. Majors and Dr. Kosminsky are eligible for reappointment.

In closing, I wish to extend our thanks to the Council for the hearty cooperation and support in our action relative to the J. L. Statler case.

Delegate to the American Medical Association—Delegate Brooksher announced that a report of the two sessions of the House of Delegates of the American Medical Association had been reported in the July and October, 1938, issues of The Journal of the Arkansas Medical Society.

REPORT OF THE COUNCIL

VAL PARMLEY, Chairman

Council of the Arkansas Medical Society met twice during the fiscal year ending today. The first meeting, known as the mid-summer meeting, was held in Little Rock at the call of the Chairman. At this meeting regular business consisted of discussion of reports received from committee chairmen and reports of the various councilors.

At this meeting the council went on record, after considerable discussion, as indorsing the efforts of the University of Arkansas School of Medicine to maintain a class A rating, and promised the assistance of the Society to maintain this rating.

The Farm Security Administration medical practice was discussed at great length and Drs. McNeil, Hawkins and Brooksher were named as a committee to further study this question.

The usual mid-winter meeting was held December 5, 1938 at Little Rock. The usual business of discussion of the reports of committee chairmen and the reports of councilors was transacted. Following this, representatives of The State Medical Board of the Arkansas Medical Society were invited to participate, and they presented the status of the medical board with reference to the denial of license to J. L. Statler, who was connected with Norman Baker at Eureka Springs. After listening to the plea of the Board, the council went on record to support the Board in its legislation and litigation regarding the denial of this license.

The council also approved the request of the registered technicians that they be permitted to hold an annual session at the time of the meeting of the Medical Society, and that they be privileged to hear some of the speakers on our program.

REPORT OF TREASURER
R. J. CALCOTE

Balance reported at last annual meeting,	
April 18, 1938	\$12,769.28
Receipts during Year:	
Dec. 3, 1938 Rec'd of Sect'y	
account of dues	\$4,000.00
April 4, 1939—Rec'd of Sect'y	
account of dues	2,500.00
April 4, 1939—Rec'd of Sect'y	
account of Journal	3,000.00
Interest on Savings Acc't	81.27
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Total Receipts During the Year	9,581.27
Total Funds Available During Year	\$22,350.55
Disbursements During Year,	
Vouchers No. 888 to No. 1015 Inclusive	10,124.09
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Balance on Hand at Close of Business	
May 6, 1939	\$12,226.46
May 6, 1939, Letter from W. B. Worthern	
Co., stating balance	5,369.25
Letter from Commercial Nat'l Bk.	
stating balance	2,500.00
Letter from Union National Bank	
stating balance	4,361.79
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	\$12,231.04
Less Outstanding Check Union National	
Bank No. 1011	4.58
<hr/>	
	\$12,226.46

REPORT OF THE SECRETARY
W. R. BROOKSHER, M. D.

The membership of the Society today is 995; one year ago it was 978. The total membership for 1938 was 1067 as compared with 1072 in 1937. We discern an increased interest in the affairs of organized medicine by the physicians of Arkansas, evidenced by the number of former members who have renewed their affiliation for 1939. The general average of membership in organized medicine over the county is 66%; our ratio is about 55%. There remain a large number of eligible, worth-while physicians in the state who should be induced to support the affairs of the Society by becoming active members.

Arkansas ranks too low in the percentage of its physicians who are Fellows of the American Medical Association. Only by fellowship do physicians contribute financially to the support of the national body. It is urged that more of our members become fellows of the American Medical Association.

The Society received in payment of assessments by members in the period April 30, 1938, to April 30th, 1939, \$4,940.00. In the same period the revenues of The Journal of the Arkansas Medical Society were \$5,504.14. The Miller County Medical Society made refund to the Society of \$122.44 last year, representing excess received from the commercial exhibit over the costs of entertaining the 1937 session at Texarkana. From restricted deposits in closed banks the Society received \$66.59 in the past year.

During the year your secretary has attended the two sessions of the House of Delgates of the American Medical Association, 6 councilor district medical society meet-

ings, addressed 15 lay groups, and attended a large number of county medical society meetings, conferences and committee meetings.

We are pleased to report that a continued enthusiasm pervades the ranks of the Society; there is determination to maintain the spirit and right of private enterprise and freedom in the practice of medicine. There is an alertness on the part of the individual physician to the economics of medical practice. He wishes to be informed on organization affairs. The organized medical profession is carrying on with high ideals, striving to provide better medical service for the American people. While this is indeed gratifying, there is opportunity for further activity by individual physicians and county medical societies. The field of public relations needs much cultivation by this Society.

Our efforts have been materially assisted by the kindly cooperation of President Wolfermann, the councilors, the officers and the membership as a whole during the year. For this we express our gratitude.

REPORT OF PETER A. DEISCH,
LEGAL COUNSEL

As Dr. Shuffield, chairman of the legislative committee, has reported on matters connected with the recent session of the legislature, it is needless for me to dwell on that topic. And as Drs. Fishbein and Hertzler will probably discuss pending national legislation, I will not pause to analyze the two bills now pending in the Congress affecting your profession.

All of us are aware of the fact that the responsible heads of the American Medical Association, and of the District of Columbia Medical Society, are under federal indictment, the causes and incidents of which are as follows:

In February 1937, the Group Health Association, Inc., filed its certificate of incorporation. This corporation thereupon entered into a contract with the H. O. L. C., by which the latter agreed to pay to the corporation the sum of \$40,000, over a period of two years. Thus was created the appropriation of government money for the financing of a private corporation to provide medical services in the District of Columbia. The interlocking character of the arrangement was further established by a stipulation which provided that two of the five members of the executive committee of the Group Health Ass'n would be nominated by the H. O. L. C. board, and that the by-laws of the association would be satisfactory to the H. O. L. C.

The legality of the action of the H. O. L. C. in expending money of the tax-payers is not attempted to be defended, even by themselves. Not even by a wide stretch of the imagination can it be contended that a department can have money appropriated for it, and then justify expenditures for something entirely foreign and separate and apart from the purpose of the Congress when it made the appropriation.

Later, the Department of Justice charged that alleged obstructionist tactics adopted by the district medical society and the A. M. A. are in conflict with the anti-trust laws forbidding "combinations in restraint of trade."

It is generally recognized that corporations are not permitted to practise medicine, yet the contract of the

G. H. A., Inc., with the H. O. L. C., contains a provision for "substantially complete medical and surgical services to such employes of the H. O. L. C., as care to join it on a reasonable monthly basis."

On Aug. 19, 1938, assistant attorney general Thurman Arnold, who is in charge of this criminal prosecution, made the statement: "The A. M. A., by use of various types of pressure, declines to allow a patient to be admitted to a hospital unless he is attended by a member of that association. The department, of course, would regard as reasonable attempts of the medical association to require the highest standards. What they are doing, however, is to prevent qualified physicians from practicing their profession in hospitals because they disagree with their social views as to the best method of furnishing medical care to the poor. The department is only interested in insuring equal opportunity for all qualified persons to compete in rendering services."

On Dec. 20, 1938, the U. S. Grand Jury for the District of Columbia, returned an indictment against the A. M. A., Medical Society of the District of Columbia; Harris county, Texas Medical Society; Washington Academy of Surgery; and the responsible heads of each of those organizations, including Drs. Wm. C. Woodward and Morris Fishbein, charging that they combined and conspired to restrain "trade" in the District of Columbia; namely to restrain Group Health Association, Inc., in its "business of arranging for the provision of medical care and hospitalization for its members and their dependents on a risk sharing prepayment basis."

The position of the Department of Justice, as outlined by Mr. Arnold, is that the expulsion, or threatened expulsion by the medical society of its members for allying themselves with the G. H. A., or for having professional relations with doctors of that organization, in effect amounts to forcing members of the medical society to participate in an illegal boycott of G. H. A. doctors, and that the exclusion by Washington hospitals of doctors who were not members of the medical society (thereby excluding doctors of the G. H. A.) amounted to coercion upon them, and that this is a violation of the anti-trust laws because it is an attempt on the part of one group of doctors to prevent qualified doctors from carrying on their calling. The department interprets the law as prohibiting combinations which prevent others from competing for services as well as goods.

All medical practise acts provide that "No person shall practise the healing art who it not licensed to do so." Let us see whether the G. H. A., or any other corporation is a "person" within the meaning of this law.

A learned profession can only be practiced by one who has been authorized to do so after an examination as to his knowledge of the subject. A corporation, because of its impersonal and fictitious character, has no mind and cannot think. For this reason, it cannot meet the educational requirements, nor can it diagnose a case or prescribe treatment therefor. If a corporation were licensed to practice law or medicine, there would be a dual allegiance because of the fact that a corporation can only act through its agents and employees, who would owe a duty to the corporation as well as to the patient, and such duties might conflict.

If the G. H. A., Inc., is practicing medicine without a license, which it did not and cannot obtain, then it is illegally engaged in the practice of that learned profession.

ARE THE ACTIONS OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA, A LEGAL AND REASONABLE EXERCISE OF THE SOCIETY'S FUNCTION?

A section (Chap. III, art. I, sec. 2) of the code of ethics of the A. M. A. states: "In order that the dignity and honor of the medical profession may be upheld, its standards exalted . . . and the advancement of medical science promoted, a physician should associate himself with medical societies . . . in order that these societies may represent the ideals of the profession."

When a physician does join a medical society, the rules and by-laws of the society are an agreement which he expressly or impliedly accepts, and by which he agrees to govern his professional conduct.

A society's only means of keeping erring members in line are censure, suspension and expulsion. These weapons are legally recognized checks on straying members, and can only be used against individuals after charges have been preferred against them.

In the incidents which led up to the statement of Attorney General Arnold, several physicians became professionally affiliated with the G. H. A. Bear in mind that G. H. A. was in all likelihood practicing medicine illegally; that the physicians employed were primarily agents of the association rather than of the patient; that the by-laws of the association expressly provided that "The medical director shall render such reports as the board of trustees shall require" which thereby would tend to abolish all privacy and secrecy between physician and patient; that there was absolutely no freedom of choice by the patient of his physician.

That the physicians who allied themselves with the G. H. A. thereby violated some of the most cardinal rules of their medical organization, cannot be questioned. They agreed when they became members of the society to be bound by its rules, and they have no right to complain when they are expelled from membership, for the violation of rules which they contracted to observe.

It is very important at this point to digress slightly from our main theme and call attention to the fact that under the code of medical ethics, contract practice per se, is not considered unethical. It is only deemed so when certain objectionable features or conditions exist in the contract, among which are the following: 1. When there is solicitation of patients directly or indirectly. 2. When there is interference with reasonable competition in a community. 3. When free choice of a physician is prevented.

Does the G. H. A. violate those rules? It is almost superfluous to state that that organization violates every one of the above rules.

IS MEDICAL SERVICE SUCH A COMMODITY AS TO COME WITHIN THE PURVIEW OF THE ANTI-TRUST LAW?

The law reads: "Every contract, combination in the form of a trust or otherwise, or conspiracy in restraint of trade or commerce among the several states . . . is declared to be illegal."

We note that the contract, combination or conspiracy must be in restraint of "trade" or "commerce"; and it must furthermore be "among the several states," i. e., interstate, to be illegal.

What is "trade" and "commerce"? Webster defines "trade" as "the act or business of exchanging commodities by barter . . . commerce, traffic, barter."

Where does medical service fit into this picture? Is medical service a commodity of trade or commerce? Is medical practice to be considered as being interstate in character? Whether labor or service is skilled or unskilled, manual or intellectual, it cannot be classed as a commodity; nor can it be held as an article of "trade" or "commerce," and therefore does not come within the purview of the anti-trust laws.

Is the practice of medicine and surgery interstate in its scope? To merely mention this question would seem to be sufficient to drop it from consideration. When a doctor examines a patient in his office, or goes to the patient's home, or operates on his patient at his office, or at the hospital, can we possibly make an interstate act out of this?

It may be argued that the doctor sometimes travels to treat a patient in another state; or that his patient travels from another state to see the doctor for examination and treatment; or that a prescription is given which may be filled in another state. Are not these acts of travel interstate in character? It is indeed true that they may be so, but the traveling from one state to another is merely incidental to the act of treatment, which is always local.

From the foregoing it will be observed that the prosecution of the A. M. A., District Medical Society; Harris County, Texas, Medical Society; Washington Academy of Surgery; and the 21 individual practitioners is for an offense not set out by law, in a calling which is not subject to congressional regulation, except directly in the District of Columbia, and not subject to regulation as "commerce" anywhere, least of all within the state of Texas.

Even if we concede that the A. M. A. is not perfect, or that its code of ethics is too rigid, in any case it is the guardian body which sustains the high standards of healing used in the United States, and it is pitiable to see the power of the United States government being used to undermine the confidence of laymen in the integrity and decency of their doctors.

Paul Jones, Mound Valley, Kansas, a long-time member of the Society was introduced by Val Parmley.

Charles S. Holt reported as fraternal delegate from the Society to the 1939 meeting of the Oklahoma State Medical Association.

By motion (Allbright-Kosminsky) the following amendment was adopted:

To amend Article IX, Section 2, to read as follows: "The President-elect, the Vice-presidents, the Secretary, and the Treasurer shall be elected annually, each to serve a one-year term. On the expiration of his term as President-elect, that person shall automatically succeed to the Presidency and shall serve as President for the ensuing year. Each year five Councilors shall be elected each to serve a two-year term. All officers shall serve until their successors are installed."

By motion (Kosminsky-Allbright) the following amendment was adopted:

To amend Chapter IV, Section 2 of the By-Laws, where it states "thirty days prior to the annual meeting" to read "March 1st."

Miss Erle Chambers, Executive Secretary of the Arkansas Tuberculosis Association, was intro-

duced, and spoke of her appreciation for the cooperation of the Society and expressed the wish that the Society's history would record the fact that the Society organized the Arkansas Tuberculosis Association in 1908.

Telegrams were read from Paul L. Mahoney, Little Rock, and Ralph M. Sloan, Jonesboro.

The following nominating committee was then selected:

J. C. Hughes, First District.

S. J. Allbright, Second District.

J. O. Rush, Third District.

E. E. Barlow, Fourth District.

R. C. Kennerly, Fifth District.

P. H. Phillips, Sixth District.

W. T. Wootton, Seventh District.

Jos. F. Shuffield, Eighth District (in later absence of Dr. Shuffield, Hoyt R. Allen served).

J. H. Fowler, Ninth District.

Geo. M. Love, Tenth District.

Congressional District meetings were then held to select nominees for appointment to The State Medical Board of the Arkansas Medical Society.

The House of Delegates then adjourned.

SCIENTIFIC SESSION FIRST GENERAL SESSION MAY 8, 1939, 1:30 P. M.

The meeting was called to order by President Wolfermann.

Hon. Leo P. McLaughlin, Mayor, Hot Springs National Park, welcomed the Society.

D. B. Stough, President, Garland County Medical Society, welcomed the Society as follows:

The very wonderful privilege has been accorded me of welcoming the Arkansas Medical Society to Hot Springs. The Medical Society knows that it needs no formal welcome. Many are the meetings that have been held in our city. Many are the opportunities that have been afforded our people to make the Society realize how welcome they are. Much of its history has transpired here in the meetings and we hope will again.

Our opportunities for entertainment here are, as we all know, many. Our first guest in Hot Springs of importance, although he was not a doctor, was DeSoto; and since his time we have been under the yellow banner of Spain, the Tri-color of France, and the Stars and Stripes. Had Spain realized her opportunity, we might have been a Spanish province and like our neighbors in South America, a Spanish speaking country; but destiny has decided otherwise and now we are a part of what Lloyd George says, "the conscience and sanity of the American nation which resides along the great Mississippi Valley."

Whatever our purpose is today, we owe to our pioneer ancestors, who have made this nation what it is. It is our duty to carry on and to perpetuate that which they have founded.

It is customary to say that there has been no time like the present in the history of our great profession. So glorious and so fruitful has the record of its activities become that each year presents new and startling developments. In union there is strength, in unity there is invincibility. It is well that we should meet in order to enjoy the fruits of our labors, the harvest of research workers, who bring to our notice the advancements that have occurred during the last year. We meet at a time when there is much turmoil, confusion of thought and propaganda, disturbing the serenity of our beloved profession. We have only to look back as well as forward to be assured that, while we are receptive to all progress, we must be careful that it is really advancement and professional betterment and that all is in the interest of medicine and humanity. It would seem that we are, according to latest developments, merely on the threshold of so many vexing problems, such as cancer and pneumonia. So much work has been done in the last year that I shall not take the opportunity to discuss that in any detail.

It has been said by someone that "all work and no play makes Jack a dull boy." Let us hope that you will improve the opportunity while you are here to enjoy and participate in all the entertainments prepared for you. With this wish in mind and with the belief that this meeting will be a fruitful, happy and successful one, the people of Hot Springs, ladies and gentlemen, bid you welcome.

Earle H. Hunt, Clarksville, responded to the addresses of welcome for the Society as follows:

I feel very much like the young city born and reared dude who had come out in the Ozark mountain regions to visit an uncle. While there he put on his city riding habit and went for a horseback ride. He came to a fork in the road and met a young 12 year old mountain boy and his faithful dog, stopped and said: "sonny, where does this left road go to?" The boy replied: "I don't know." "Where does this right fork go to?" The boy replied: "I don't know." The dude then said: "Well, sonny, you don't know much, do you?" The boy replied: "No sir, but I am not lost."

Well I may not be exactly and actually lost, but I do feel my littleness when I visualize myself here before this august gathering, and too, after listening to such an ably delivered welcoming address. Sometimes I feel rather at home making an after dinner talk to gentlemen only, and I even feel fairly certain of myself while discussing some of the few medical subjects with which I have had experiences, but in trying to respond to an address at such a time, before such a sizeable audience in a place with so much grandeur and splendor, I at first think of that song about the boy wanting to kiss the girl if he could only get the time, girl, and the place, all at a convenient and coincidental spot. Then I think of these famous Hot Springs, the wonderful doctors here now, and that vast array of intelligencia of the near and distant past—such as Drs. Greenway, Collins, Parker, Jelks (all of them) Hebert, Martin, Greene, and others, whom time will not permit to be mentioned. What would those master minds think of we younger upstarts and our attempts to carry on as we do today. Would they sanction or condemn our methods of today? After all they were intensely human and I rather imagine they would but smile and let us do as we

please, as they were salesmen and diplomats, as well as practitioners of this just healing art. Those fellows opened and paved the way for you fellows of today, but for them and their near miraculous cures of years ago, the protest of all health and water cures would not be carrying the wonderful reputations which it does and so rightly deserves.

Hot Springs has always been a wonderful place to me. I have some sentimental memories of the place. The Arkansas Medical Society met here back in 1912, May 15-16-17th. I was to be married on June first and ran over here, just for one day. After a champagne banquet at the Arlington Hotel, Johnie Procter, Johnie Wood and I met on the veranda of the old Arlington and I told them I was to go back home and be a good boy and get married on June 1st. Proctor found a check for \$100.00 which he had never expected to collect and suggested that we spend it. We went to the old Arkansas bar room, got a chauffeur for a Winton Six, gave him a few bracers, got in the car and started up Whittington Avenue at about 50 miles per hour. When nearing the ostrich farm some one of the crowd yelled, "turn around," and blamed if the chauffeur didn't obey, jumping across the car tracks, curbs and taking 3 or 4 panels out of the ostrich farm fence and costing each of us \$125.00 for repairs on that Winton six. Anyway I was present on June 1st.

For years and years all the members of the Arkansas Medical Society have personally enjoyed your hospitality. We know we will this year and we hope for years to come. We are glad and honored to be here. We are willing and anxious to partake of any and all of your reports and highly delighted to contact and hobnob with you, your wives, nurses, technicians and sweethearts.

R. R. Kirkpatrick took the chair.

President Wolfermann read the President's Annual Address (page 1).

The scientific program followed in order:

"American Medicine and the National Health Program," Morris Fishbein, Chicago.

"The Postoperative Care of the Average Abdominal Case," Geo. V. Lewis, Little Rock.

"Cardiotoxic Goiter," A. E. Hertzler, Halstead, Kansas.

"Use of Aciform in the Treatment of Chronic Rheumatic Disorders," F. J. Scully, Hot Springs National Park.

"Appendicitis in Children," Jos. Brennemann, Chicago.

On Monday afternoon, members, wives and guests of the Society were entertained by the Garland County Medical Society at a Dutch supper honoring Morris Fishbein and A. E. Hertzler at a tavern on Lake Hamilton.

PUBLIC MEETING**Arlington Hotel****May 8th, 1939****7:45 P. M.**

The meeting was called to order by D. B. Stough, President, Garland County Medical Society.

The invocation was given by Rev. Robert Lee Baird, Episcopal Church, Hot Springs National Park.

President Wolfermann was introduced and, in turn, presented the guest speakers:

"The New Deal in Medicine," A. E. Hertzler.

"Fads and Quackery in Healing," Morris Fishbein.

(The addresses were broadcast over the facilities of KTHS, Hot Springs National Park):

The benediction was said by Rev. Robert Lee Baird.

MEMORIAL SESSION**TUESDAY, MAY 9TH****First Presbyterian Church**

NECROLOGY COMMITTEE—L. T. Evans, E. E. Barlow and Thos. Douglas with President Wolfermann on the rostrum.

INVOCATION—Rev. Marion A. Boggs, First Presbyterian Church.

SELECTION—First Presbyterian Choir

Mrs. Rena Caldwell, Director;

Miss Catherine Lea, Organist.

"Souls of the Righteous"—Noble.

The names of the deceased members were read by E. E. Barlow.

ADDRESS—L. T. Evans, Batesville, Chairman, Committee on Necrology.

SELECTION—First Presbyterian Church Choir

"Still With Thee"—Foote.

READING—Mrs. Frances Hoffman.

BENEDICTION—Rev. Marion A. Boggs, First Presbyterian Church.

IN MEMORIAM

Harvey Doak Wood, Fayetteville, May 13, 1938.

Matt S. Dibrell, Van Buren, June 1, 1938.

James R. Autrey, Columbus, June 17, 1938.

Jesse Johnson Willingham, Fort Smith, June 30, 1938.

Thomas Ellsberry Gray, Winslow, July 11, 1938.

James Foster Merritt, Hot Springs National Park, August 11, 1938.

Vernon Tarver, Star City, September 11, 1938.

Thomas M. Fly, Little Rock, September 21, 1938.

James Houston Lamb, Paragould, September 21, 1938.

Maurice Farvish Lautman, Hot Springs National Park, September 23, 1938.

Orvis E. Biggs, Hot Springs National Park, Oct. 17, 1938.

Joseph Lowrey Baird, Marked Tree, October 31, 1938.

Andrew J. Hamilton, Rison, October 31, 1938.

Homer Scott, Little Rock, November 1, 1938.

Eugene A. Hawley, Texarkana, November 4, 1938.

Edward Everett Shell, Prescott, November 18, 1938.

Andrew S. Gregg, Fayetteville, November 21, 1938.

Amos W. Troupe, Pine Bluff, November 21, 1938.

Charles Albert Bates, Lake City, November 24, 1938.

William A. Purifoy, El Dorado, November 25, 1938.

Octavius Lamar Williamson, Marianna, Nov. 26, 1938.

Carl G. Davis, Hot Springs National Park, Dec. 3, 1938.

Ephriam Graeme McCormick, Prairie Grove, Dec. 12, 1938.

Oscar Barksdale, West Memphis, December 18, 1938.

Owen G. Blackwell, Pine Bluff, January, 1939.

Lawrence Lloyd Purifoy, El Dorado, January 7, 1939.

James Houston West, McCrory, January 29, 1939.

Joseph B. Trice, Van Buren, February 10, 1939.

Hercules R. Webster, Texarkana, February 16, 1939.

Christopher C. Gray, Batesville, February 17, 1939.

Walter Barwick Bruce, Helena, February 22, 1939.

John Calvin Walker, Walkerville, March 24, 1939.

James William Felts, Alicia, March 31, 1939.

Dale Dildy, Little Rock, April 5, 1939.

William Johnston, Hardy, April 14, 1939.

Morriss Henry, Helena, April 17, 1939.

"MEMORIAL ADDRESS"**L. T. EVANS, BATESVILLE**

There is a time appointed for all things, and among them is a time to die. No flight of fancy, no stretch of imagination is required to comprehend the force of the lesson taught by that grim monster.

Again and again we are called upon to suspend our daily labor, and bury our dead. Again and again is impressed upon our heart and reiterated in our ear, the solemn lesson that from earth we came, and into earth we must return again.

A speaker cannot do anything for the perpetuation of the glory of extraordinary souls. La Sage was right when he said that "Their deeds alone can praise them." No other praise is of any effect where worthy names are concerned. It needs but the simple story of deeds faithfully performed to create and sustain glory.

Before the task assigned to me this hour, I stand with bowed head and trembling heart. To speak words that shall be worthy of this occasion is a difficult if not a hopeless task. There is something in the human heart that causes us to wish to be remembered by those we love. In the floral kingdom no flower is more beautiful, more lasting, more fragrant than the rose. So it seems fitting to bring in memory of our departed loved ones the white roses of remembrance so typical of the life and character of those we mourn, whose example of faithfulness,

courage and loyalty in patriotic service will remain a hallowed benediction.

I never craved more than today the gift of clear insight and of accurate, sympathetic statement. For I think that the real lessons of these lives are tremendously important to us at this hour. Their spirits would arise to smite us if I simply gave way to eulogy. You would neither be comforted in your sorrow, nor strengthened to carry on, by simply formal, conventional words. I must try, therefore, to speak of them as I knew and loved them.

One after another we have seen our brethren gathered to the tomb, and we have mourned for them and for ourselves. Now these dear friends—these dear brothers, are added to the number. Verily, the cup of our affliction is tilled, filled to the brim, and in all its bitterness we are compelled to drain it to the dregs.

Would that we could do justice to their memory, and properly express the high need of praise so justly their due. We can truly say:

None knew them but to love them
Nor named them but to praise:

A place is left vacant that will not soon be filled. A bright light of the fireside, the social circle, the sick chamber, and the lodge room, is utterly extinguished, and the sad wail of lamentation for their death, vibrates and finds an echo in every heart.

Kindly will we remember them until our hearts have ceased to beat their

"Funeral marches to the grave."

One of the finest things to be gotten out of life is the enjoyment to be derived from association with real friends. The older one gets, the stronger is the realization of the need for real friends. But life is fleeing and real friendships are not made in a day.

"He who has a thousand friends,
Has never one to spare,
And he who has one enemy,
Will meet him everywhere."

One of the most beautiful things about true friendship is that it lives always, and does not end with death. And one of the noblest traits of humanity is the loving remembrance with which it clings to the memory of the dead.

We believe,

"Absent or dead, still let a friend be dear,
A sigh the absent claims, the dead a tear."

And so, we are reverently gathered here, in the quiet and peace of this hour, to turn again with mournful rustling the leaves of memory, and

to pay a tribute of love and friendship to our beloved whose chairs are vacant.

They were genial, gracious, kindly gentlemen who treated all who came within the circle of their influence, rich or poor, exalted or lowly with the same rare and exquisite courtesy. Theirs was the noblest type of American manhood, self-reliant and self-made, incorruptible in private and public life. To the poor and humble they were always accessible.

"Their life was gentle, and the elements
So mixed in them that nature
Might stand up and say to all
The world 'They were men'."

Men of unsullied honor, of unswerving integrity and unwearying zeal in the cause of right, in every assembly they were recognized as masterful force.

No sacrifice too great, no service too onerous, when the good of humanity was involved. They blended the splendid assets of servers and leaders. Never too proud to perform the most menial duty; always brave and wise enough to lead with valor and direct with wisdom. We can well say of them as Browning wrote of the "Lost Leader"—

"We have loved them so, followed them,
honored them,
Lived in their mild and magnificent eyes
Learned their great language caught their accents,
Made them our pattern to live and to die."

Truly they must be written down as

"Ones that never turned their backs, but
marched breast forward,
Never doubted clouds would break,
Never dreamed though right were worsted, wrong
would triumph,
Held we fall to rise, are baffled to fight better.
Sleep to wake."

Their voices were that of an oracle, their hearts the treasure house of virtues that shone forth in luminous light to gladden the lives of others.

A royal prince in the household of freedom they won and bestowed friendship with easy grace and every pulsation of their great hearts sent forth healing streams of tender affection and generous charity.

Their names and fame will live in the annals of medicine through an aeon and, the vital force and power of the influence of their noble lives will abide as long as time shall last.

They now rest in calm repose where they will sleep until God's immortal trumpeter shall awaken their spirits in the sunlight of eternal dawn.

A wise man has said that they truly mourn the dead who live as they desire. This is a great

truth which should not be forgotten, for our mourning, is an empty mockery unless we lead lives, the nobility and dignity of which expresses our veneration for the departed.

If these brothers whom we call dead, if these companions could speak to us today—if the sound of their voices could come back to us from the silent shore, what words would they speak into our listening ears? Would they speak aught of the great political and economic questions which vex us? Would their words concern the grasping schemes of nations and the petty ambitions of men? Would they speak to us of party, or business, or commerce?

Nay, out of their richer and holier experiences they would speak to us in the old familiar way of the simple things of life—the things nearest and dearest to the human heart.

I think, first of all, they would tell us that we **SHOULD FACE THE FUTURE WITH FAITH, HOPE AND COURAGE; THAT WE SHOULD NOT FEAR DEATH, FOR AT EVENTIDE THERE IS LIGHT.** They would tell us that there is a life beyond this life, and that in that life there is work to do and tasks to accomplish. They would tell us that there are sweet and unchanging friendships in the spirit land, that is a beautiful home where there are many happy reunions, but no sad partings, a glory land where no sorrows shall gnaw the heart nor even a tender tie be broken.

They would remind us too, of the **NOBILITY OF SACRIFICE, AND OF THE DUTY TO MINISTER UNTO OTHERS.** They would tell us that the world remembers only for awhile those who have been its masters, but that it never forgets those who have been its servant.

They would have us remember **THE SPIRIT OF AMERICAN PATRIOTISM.** They would tell us that the noblest thing anyone can do is to live for their country, live to make it a purer, nobler and finer nation. And they would recall the words of Proverbs: "Righteousness exalteth a nation; but sin is a reproach to any people."

And so we say to them as the Spaniard says when his companion departs, "Go with God. May he protect and keep you safe."

We salute, we bow our heads, we place flowers in the season of flowers, upon the graves of those who may have been called to the long sleep. They may look down on us in our tribute; and, if they do not, we are honoring ourselves in giving it. For they were ready, all of them, to give, in the words of immortal Lincoln, "the last full measure of devotion."

SECOND GENERAL SESSION

May 9th, 1939

9:00 A. M.

The Society was called to order by the President and the following program was presented:

"The Value of Drugs in the Treatment of Cardiac Disease," Tinsley R. Harrison, Nashville, Tennessee.

"Electrocardiography," S. A. Thompson, Camden.

"Heart Diseases from Which the Patient Can Recover," Fred W. Harris, Little Rock.

"The Relationship Between Heart Disease and Chronic Pulmonary Affections," Chas. T. Chamberlain, Fort Smith.

"Some Experiences in the Treatment of Cancer," E. D. Twyman, Kansas City.

"Treatment of Non-Institutional Cases of Pellagra, with Case Reports," C. N. Bogart, Forrest City.

The session adjourned at 12:30 p. m. and reconvened at 1:30 p. m., the following program being presented:

"Fractures of the Neck of the Femur," W. R. Cubbins, Chicago.

"The Use of X-ray in Chest Examinations by the Physician in General Practice," J. D. Riley, State Sanatorium.

"Urogenital Tuberculosis," H. Fay H. Jones and T. Duel Brown, Little Rock.

"Painful Nephroptosis and Its Treatment," J. C. Pennington, Nashville, Tennessee.

"Some Problems in Rectal Diagnosis," H. E. Murry, Texarkana.

"The Importance of Differential Diagnosis of Lesions in the Anus, Rectum and Lower Sigmoid Colon," Ralph E. Crigler, Fort Smith.

"Adenoma of the Recto-Sigmoid and Its Relationship to Carcinoma of the Rectum," H. G. Hummel, Little Rock.

THIRD GENERAL SESSION

May 10th, 1939

8:30 A. M.

The Society was called to order by S. J. Wolf-
ermann and the following scientific program presented:

"Treatment of Chronic Empyema," Harvey Shipp, Little Rock.

"Fractures and Dislocation of the Neck," Jos. F. Suffield, Little Rock.

"Analgesia and Anesthesia in Obstetrics," Clyde D. Rodgers, Little Rock.

"The Management of the Prolonged First Stage of Labor," Louis Rudolph, Chicago.

"Treatment of Ante-partum Hemorrhage," B. J. Reaves, Little Rock.

"Obstetrics in the Small Hospital," John H. Wilson, Dyess.

SECTION ON EYE, EAR, NOSE AND THROAT May 9th, 1939

Room 224, Arlington Hotel

The meeting was called to order by O. H. King, Chairman.

The following program was presented:

"Treatment of Sinus Disease," Jack Agar, Little Rock.

"My Experience with Sulfanilamide in the Treatment of Ophthalmic Diseases," K. W. Cosgrove.

"Tracheotomy," O. M. Marchman, Dallas.

The session was followed by a round table luncheon.

The following officers were elected: Virgil Payne, Pine Bluff, Chairman; Jack Agar, Little Rock, Vice-Chairman, and Raymond C. Cook, Little Rock, Secretary.

FINAL SESSION HOUSE OF DELEGATES

May 10th, 1939

1:30 P. M.

The meeting was called to order by President Wolfermann.

The following delegates and county society members seated as delegates in the absence of regularly elected delegates by action of the House of Delegates were present:

M. C. Crandall, Ashley; J. H. Fowler, Boone; Rufus Martin, Bradley; E. E. Barlow, Chicot; Junius Ruth, Cleveland; W. P. Scarlett, Conway; W. W. Verser, J. T. Altman, Craighead-Poinsett; T. J. Stewart, Cross; H. T. Smith, Desha; O. H. King, J. M. Proctor, Jett Scott, Garland; M. F. Kelly, Grant; R. J. Haley, Jr., Greene; A. C. Kolb, Hempstead; W. G. Hodges, Hot Spring; L. T. Evans, Independence; J. M. Lemons, Jefferson; J. M. Kolb, Johnson; J. C. Hughes, Lawrence; B. C. Middleton, Miller; F. D. Smith, Mississippi; J. B. Stueart, Montgomery; R. C. Kennerly, Ouachita; A. H. Maddox, Phillips; Roy I. Millard, Pope-Yell; J. C. Gilliam, Prairie; Hoyt R. Allen, S. C. Fulmer, H. W. Hundling, M. J. Kilbury, Geo. V. Lewis, Jos. F. Shuffield, Pulaski; J. R. Loftis, Randolph; Chas. S. Holt, H. Moulton, Sebastian; C. C. Hanchey, Sevier; J. O. Rush, St. Francis; W. S. Riley, J. B. Wharton,

Jr., Union; A. H. Hathcock, Washington; S. J. Allbright, White, and C. E. Dungan, Woodruff.

Other members of the House of Delegates present were:

President Wolfermann, Councilors H. A. Stroud, T. J. Stewart, H. T. Smith, R. B. Robins, Euclid Smith, Val Parmley, D. L. Owens and Clyde McNeil, Secretary Brooksher, and the following past-presidents: E. E. Barlow, Geo. B. Fletcher, L. J. Kosminsky, J. M. Lemons, H. Moulton, M. L. Norwood, and W. T. Wootton.

W. T. Wootton presented the report of the Nominating Committee:

President-Elect—H. T. Smith, S. C. Fulmer, T. G. Porter.

First Vice-President—J. M. Proctor.

Second Vice-President—B. L. Moore.

Third Vice-President—T. J. Stewart.

Treasurer—R. J. Calcote.

Secretary—W. R. Brooksher.

Sergeant-at-Arms—T. P. Foltz.

Councilor, First District—F. D. Smith.

Councilor, Third District—J. O. Rush.

Councilor, Fourth District—S. W. Douglas.

Councilor, Fifth District—R. B. Robins.

Councilor, Seventh District—Euclid Smith.

Councilor, Ninth District—J. F. John.

Delegate to the American Medical Association—W. R. Brooksher.

Alternate to the American Medical Association—Val Parmley.

By motion (King-Allen) the report was accepted.

President Wolfermann appointed M. C. Crandall, Geo. B. Fletcher, and Jos. F. Shuffield, tellers, and the House of Delegates voted by ballot upon the names of H. T. Smith, S. C. Fulmer, and T. G. Porter for President-Elect. H. T. Smith received a majority of votes on the first ballot and was declared elected by President Wolfermann.

By motion (S. C. Fulmer-Hoyt R. Allen) the election of H. T. Smith was made unanimous.

By motion (Barlow-Kosminsky) the Secretary cast the unanimous ballot of the House of Delegates for all offices except Secretary and Delegate to the American Medical Association. President Wolfermann cast the unanimous vote of the House of Delegates for the offices of Secretary and Delegate to the American Medical Association.

The report of the Reference Committee was read by the Secretary.

REPORT OF THE REFERENCE COMMITTEE

President's Address—We, your committee, do not think best to make changes in the constitution with reference to selection of officers for the state society. We agree with the suggestion that the secretary be made chairman of the scientific program committee. Relative to the finances of the State Medical Board of the Arkansas Medical Society, we advise that the President appoint a committee to confer with a committee from that Board to work out a feasible plan relative to finances. We thoroughly endorse remarks relative to the University of Arkansas Medical School.

Liason With Arkansas Tuberculosis Association—

We recommend that relations with the Arkansas Medical Society remain as that in the past.
History Of Arkansas Medical Society—

We realize that the history of the Arkansas Medical Society is not complete. We recommend that the committee be continued and that the past presidents do as requested by their chairman, Dr. Frank Vinsonhaler, and cooperate with him as suggested in completing this most excellent study.

Survey Of Need And Supply Of Medical Care—

We have read the excellent report of Dr. A. S. Buchanan, of the Need and Supply of Medical Care Committee, and also the supplementary report of Dr. S. W. Douglas. We wish to commend them for their excellent work in this line.

Postgraduate Study—

We believe that on account of Little Rock being centrally located that for the time being postgraduate study be continued as it has been in the past in Little Rock.

Secretary and Treasurer Reports—

We wish to place our endorsement and approval on the reports of the Secretary and of the Treasurer.

Maternal And Child Welfare—

We want to commend the work of the Child Welfare Committee and we especially agree with the committee that the refresher courses be given in different parts of the state, thereby giving a large number of doctors a chance to use them.

Committee on Syphilis Control—

The committee on syphilis control shows excellent work and the committee should be continued.

Public Relations Committee—

This committee made a very excellent report which we endorse. We think that every physician should be a committee of one to help to educate the public along this line.

Heart Disease—

We recommend that each county society should devote at least a part of their time of one meeting a year to the discussion of heart disease.

Cancer Control Committee—

This committee made an excellent report and should be continued with two additional members as per their request. This committee makes six recommendations and we feel that they should be adopted.

Study of Midwifery—

The study of midwifery was a complete report in every way. We agree with the committee that there should

be more instruction and suggest a special plan be worked out by which this can be accomplished.

Medical Legislation—

We congratulate this committee on the success on having beneficial laws passed. The most notable was the one to make it possible for the continuation of the Arkansas Medical School as a class A medical school. We also feel that they should be commended for defeating laws that would have been detrimental to the profession of our state.

The Committee of Scientific Work—

The report presented at the meeting has shown a splendid progress and is definite proof of their untiring efforts.

Medical Education And Hospitals—

We commend this committee on its very excellent report and endorse all of their recommendations.

Health And Public Instruction—

Report of this committee is very complete and recommends an ideal program which we hope will be lasting benefit to medical men of the state.

H. MOULTON

H. T. SMITH

M. L. NORWOOD,

Chairman.

By motion (Evans-Owens) the report was adopted.

D. L. Owens presented the report of the Council.

REPORT OF THE COUNCIL

May 8, 1939

Allowed expenses of the 64th annual session. Allowed honorarium of Secretary and Counsel. Nominated J. S. Rinehart, Camden, to affiliate fellowship in the American Medical Association. Made nominations for honorary membership. Appointed D. L. Owens, H. T. Smith and E. E. Barlow as auditing committee.

May 9, 1939

Received report of Hoyt R. Allen and extended thanks for his services. Purchased 22 banquet tickets for commercial exhibitors and guests of the Society. Approved resolution calling on Congress for an appropriation for the Army Medical Library and Museum. Heard reports from councilors and past-presidents. Adopted resolution of sympathy to Joe Shuffield. Adopted vote of thanks of Chairman of Legislative Committee, the Committee and Counsel for legislative work.

May 10, 1939

Tentatively approved sending a delegate to the Pharmacopeia convention. Recommend appointment of special committee on mental health and hygiene. Received report of auditing committee. Recommended resolution to the state nurses association expression condemnation of their participation as nurses in charlatan hospitals. Adopted resolution for a workmen's compensation committee. Adopted a vote of thanks to Garland County Medical Society, the Arlington Hotel, the press and radio station KTHS for their efforts in behalf of the annual session. Adopted a special vote of thanks to W. T. Wootton.

By motion (Owens-E. Smith) the report was adopted.

Report was called for from the committee appointed to audit the books of the Committee on Postgraduate Study but no report was forthcoming.

Chas. S. Holt presented the following resolution:

Whereas, the undoubted success of the 64th Annual Session of the Arkansas Medical Society was due in large measure to the presence on our program of our distinguished visitors, We, Therefore, extend our earnest thanks to Drs. Morris Fishbein, A. E. Hertzler, Jos. Brenemann, Tinsley R. Harrison, J. C. Pennington, E. D. Twyman, W. R. Cubbins, Louis T. Byars, Jr., and Louis Rudolph. Our appreciation of their kindness in appearing is unbounded.

By motion (Holt-Allbright) the resolution was adopted.

A. H. Hathcock introduced the following resolution:

Whereas, The Garland County Medical Society, with its proverbial hospitality, has again acted the part of genial host at the gathering now drawing to a close, and

* Whereas, this meeting has been marked with the utmost of cordiality and good fellowship,

Now, Therefore, Be it Resolved, by the House of Delegates of the Arkansas Medical Society, that our thanks are hereby extended in abundant measures to the Garland County Medical Society, and to each and all of its members for the truly delightful and beneficial visit.

By motion (Hathcock-Stueart) the report was adopted.

L. T. Evans introduced the following resolution:

Whereas, every facility in the way of comfort and convenience has been placed at our disposal during this 64th annual session by the management of the Arlington Hotel,

Now, Therefore Be it Resolved, that the thanks of the Arkansas Medical Society are hereby tendered to the management and all the staff of the hotel for their untiring and generous efforts to make our stay with them pleasant and agreeable.

By motion (Evans-Shuffield) the resolution was adopted.

The Secretary then presented the names of the following members nominated for honorary membership in the Society by the Council:

W. E. Bailey, Little Rock

J. H. Campbell, Joiner

H. P. Collings, Hot Springs National Park

J. C. Gilliam, Des Arc

G. L. Henderson, Conway

B. E. Hendrix, Gillham

A. R. Howell, North Little Rock

E. B. Jones, Hartford

W. V. Laws, Hot Springs National Park

J. R. Lynn, Hazen

J. S. Rinehart, Camden

J. F. Rowland, Hot Springs National Park

By motion (Middleton-Stueart) these were elected to honorary membership.

The Secretary presented the name of J. S. Rinehart, Camden, for nomination as an affiliate fellow of the American Medical Association. By motion (Middleton-Shuffield) he was nominated to the House of Delegates of the American Medical Association for election to affiliate fellowship.

The Secretary presented the following amendment to lie on the table until the 1940 session:

Chapter VIII, Section 2, of the By-Laws: To amend the first sentence which reads, "The Committee on Scientific Work shall consist of three members of which the Secretary shall be one," by deleting the word "one" and substituting therefor, the word "Chairman."

Reports of nominations for selection to membership on the State Medical Board of the Arkansas Medical Society were then received as follows:

First Congressional District—

W. M. Majors, Paragould

H. A. Stroud, Jonesboro

R. J. Haley, Jr., Paragould

Fourth Congressional District—

L. J. Kosminsky, Texarkana

J. C. Graves, Lockesburg

P. H. Phillips, Ashdown

Fifth Congressional District—

C. C. Reed, Sr., Little Rock

Robert Hood, Russellville

J. M. Kolb, Clarksville

By motion (Allbright-Shuffield) these selections were approved for submission to the Governor.

By motion (Middleton-Stueart) the final session of the House of Delegates adjourned.

FINAL GENERAL SESSION

May 10th, 1939

The meeting was called to order by President Wolfermann.

The following Past-Presidents came to the rostrum and were introduced by M. L. Norwood: E. E. Barlow, Geo. B. Fletcher, L. J. Kosminsky, J. M. Lemons, H. Moulton and W. T. Wootton.

A. S. Buchanan, President-Elect, was escorted to the rostrum by J. M. Lemons and W. T. Wootton where he received the gavel from President Wolfermann. President Wolfermann then expressed his appreciation of the opportunity to

serve the Society as President for 1938-1939 and his grateful thanks for the support which he had received from the members.

President Wolferman: "Al, I give you this gavel and wish you everything the boys have given me during the past year."

President Buchanan: "I want all of you to help me. There are far better men in the Society for President than me but you could not have selected a man who would work harder. Anything I can do for the Arkansas Medical Society and organized medicine in the state only needs that you call on me for it. I will do my 'dead-level' best."

S. C. Fulmer and T. G. Porter escorted President-Elect H. T. Smith to the rostrum.

President-Elect Smith: "I can only say that I thank you."

H. Moulton extended an invitation for the Society to hold its 1940 annual session in Fort Smith. By motion the invitation was unanimously accepted.

The Society then adjourned sine die.

MEMBERS REGISTERED AT THE 64TH ANNUAL SESSION

ARKANSAS—M. C. John, C. A. Lumsden, C. W. Rasco, Jr., E. B. Swindler; ASHLEY—L. C. Barnes, M. C. Crandall, Winston C. Riggins, C. E. Spivey; BENTON—L. O. Greene, Guy Hodges, G. A. Hughes, Geo. M. Love, A. L. Peacock, C. L. McNeil; BOONE—S. W. Chambers, J. H. Fowler, J. G. Gladden, Ulys Jackson, O. B. McCoy, D. L. Owens, J. W. Sexton; BRADLEY—W. J. Hunt, Rufus Martin, W. B. Reasons; CARROLL—J. F. John, D. K. McCurry, Mary Jane Northcutt; CHICOT—J. A. Thompson, E. E. Barlow, E. Baker, S. W. Douglas, W. D. Easterling; CLARK—R. L. Bryant, E. E. Carter, S. N. Doane, J. N. Pate, C. J. Steed, Joe W. Reid, H. A. Ross, C. K. Townsend; CLAY—F. H. Jones, N. J. Latimer; CLEVELAND—Junius Ruth; COLUMBIA—J. J. Baker, T. H. Jones; CONWAY—J. S. McMahan, W. P. Scarlett; CRAIGHEAD-POINSETT—J. T. Altman, H. A. Stroud, W. W. Verser, Gean Atkinson; CRAWFORD—S. D. Kirkland; CRITTENDEN—L. C. McVay, A. C. Parker; CROSS—Thos. G. Price, T. J. Stewart, Thomas Wilson; DALLAS—W. S. Ellis, A. M. Stuart; DESHA—Gibbs Biscoe, Marion Leverett, H. A. Rands, H. T. Smith; DREW—Van C. Binns, A. S. J. Collins, L. B. Jones, J. P. Price; FAULKNER—Lyle L. Hassell, Robert L. Taylor; FRANKLIN—W. H. Bollinger, Thos. Douglas; GARLAND—T. N. Black, W. M. Blackshare, Frank M. Burton, N. B. Burch, E. K. Browning, P. Z. Browne, J. O. Boydstone, M. B. Bowman, Howell Brewer, B. F. Casada, Warren Chamberlain, James H. Chesnutt, G. C. Coffey, H. P. Collings, Jack Ellis, Geo. B. Fletcher, D. W. Fulmer, C. E. Garratt, W. E. Gray, G. A. Herbert, O. K. Hukill, F. Jarrell, L. E. King, Ossian H. King, W. G. Klugh, W. V. Laws, C. C. Lee, Charles H. Lutterloh, R. G. Martin, C. H. Nims, C. N. Pate, W. F. Porter, Allen R. Power, H. H. Preston, Jno. M. Proctor, E. A. Purdum, L. E. Reed, John F. Rowland, Jett Scott,

F. J. Scully, W. K. Smith, Euclid M. Smith, O. A. Smith, D. B. Stough, A. G. Sullivan, F. S. Tarleton, A. H. Tribble, H. K. Wade, S. D. Weil, W. T. Wootton, H. K. Wright; GRANT—John W. Cole, Miles F. Kelly, GREENE—Robert Haley, Jr., J. J. Hudgins, HEMPSTEAD—J. W. Branch, G. E. Cannon, H. H. Darnall, J. E. Gentry, A. C. Kolb, J. G. Martindale, Jim McKenzie, Don Smith; J. H. Weaver; HOT SPRING—W. G. Hodges, I. M. Norton, M. D. Prickett; HOWARD-PIKE—J. J. Burleson; E. V. Dildy, M. D. Duncan, W. M. Gibson, J. Hoyt, R. L. Wood; INDEPENDENCE—J. B. Askew, C. A. Churchill, Noel Copp, L. T. Evans, I. M. Huskey, O. J. T. Johnston, G. T. Laman, J. T. Monfort, J. D. Smith, F. Q. Wyatt, J. L. Weathers; JEFFERSON—Jno. S. Jenkins, M. B. Owens, W. H. Bruce, H. A. Causey, J. M. Lemons, E. C. McMullen, Virgil Payne, Wm. A. Snodgrass, Jr.; JOHNSON—Earle H. Hunt, James M. Kolb, G. R. Siegel; LAFAYETTE—A. W. Keith, F. W. Youmans; LAWRENCE—H. B. Hull, T. Z. Johnson, J. B. Elders, J. C. Hughes; LEE—C. W. Chaffin; LINCOLN—L. T. Taylor, G. C. Wood; LITTLE RIVER—P. H. Phillips, J. W. Ringgold; LONOKE—S. S. Beaty, E. A. Callahan, F. A. Corn, Wm. B. Crowgey, O. D. Ward; MADISON—Howard Farmer; MILLER—R. R. Kirkpatrick, L. J. Kosminsky, L. H. Lanier, Hary E. Murry, K. T. Mosley, B. C. Middleton; MONROE—W. L. Boswell, John W. Redman; MISSISSIPPI—J. E. Beasley, F. L. Husbands, J. H. Smith, F. D. Smith, J. M. Walls, John H. Wilson; MONTGOMERY—W. D. Freeman, J. D. Robins, J. B. Stueart, G. E. Watkins; NEVADA—A. S. Buchanan, J. B. Hesterly, O. G. Hirst, R. P. Hughes, Wm. B. H. Pool; OUACHITA—J. B. Jameson, R. C. Kennerly, R. B. Robins, B. V. Powell, S. A. Thompson, H. F. Thompson; PHILLIPS—J. Q. Blackwood, A. H. Maddox; POLK—B. H. Hawkins, Pierre Redman, POPE-YELL—W. E. Ballenger, A. C. Haney, E. J. Haster, Robert Hood, E. C. Hunt, Roy I. Millard, A. M. Rye, H. L. Montgomery, L. M. Smith, J. M. Stanford, A. B. Tate; PRAIRIE—J. C. Giliham, J. R. Lynn, T. G. Porter; PULASKI—Hoyt R. Allen, W. E. Bailey, Jeff Banks, L. F. Barrier, C. M. Brooks, R. M. Blakely, B. P. Briggs, Alan G. Cazort, F. W. Carruthers, R. J. Calcote, D. T. Cheairs, J. F. Clark, Raymond C. Cook, K. W. Cosgrove, J. B. Crawford, M. E. McCaskill, M. D. McClain, R. F. Darnall, J. C. Davis, Albert De Groat, J. K. Donaldson, Hollace D. Fowler, S. C. Fulmer, Ellery C. Gay, Oscar Gray, W. B. Grayson, Dewell Gann, Jr., J. S. Agar, D. R. Hardeman, Fred W. Harris, R. P. Harris, J. Donald Hayes, J. Harry Hayes, Henry G. Hollenberg, H. G. Hummel, H. W. Hundling, Charles R. Henry, H. Fay H. Jones, M. J. Kilbury, R. C. Kory, A. C. Kisley, V. E. Lyons, Geo. V. Lewis, J. S. Levy, Jno. R. May, M. M. Melson, O. C. Melson, R. Q. Patterson, A. F. Pirnique, Wilfred R. Parsons, John E. Parsons, Jr., Val Parmley, Sam Phillips, Randolph Smith, Grady W. Reagan, James Reaves, C. C. Reed, D. A. Rhinehart, Barton A. Rhinehart, Carl Rosenbaum, Bryon L. Robinson, J. N. Roberts, Clyde D. Rodgers, Irving J. Spitzberg, A. W. Strauss, Joe F. Shuffield, W. A. Snodgrass, Howard S. Stern, H. V. Stewart, J. A. Summers, A. C. Shipp, W. Myers Smith, W. L. Sadler, John M. Samuel, Joe H. Sanderlin, Sloan M. Sanford, Geo. Thompson, W. V. Newman, Charles Wallis, A. M. Washburn, E. H. White, Lawrence M. Zell; RANDOLPH—J. W. Brown, J. R. Loftis, J. W. Ryburn; ST. FRANCIS—C. N. Bogart, J. O. Rush, SALINE—Dewell Gann, Sr., C. W. Jones, M. G. Lawson, J. E. Little, B. L. Phillips; SCOTT—Paul Jones; SEBASTIAN—J. W. Amis, W. F. Adams, J. H. Benefield, C. E. Benefield, W. R. Brooksher, Charles T. Chamberlain, J. S. Coffman, J. H. Buckley, A. B. Dickey, Ralph E. Crigler, T. P. Foltz, B. W. Freer, D. W. Goldstein, C. W. Hall,

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Total members, 394.

Exhibitors, 27.

Visitors, 75.

Total registration, 496.

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"An artist-physician has said: 'The tendency of most persons is to regard the artist with awe as a superman endowed with talents not vouchsafed to the ordinary mortal. Most doctors have a latent artistic sense which may be developed to a remarkable degree by constant practice. When opportunity affords, slip away to the park or country, sit down on a camp-stool and practice sketching from nature. At first the results may not be satisfying, but in course of time you will be gratified to notice a marked improvement. An ample sketching kit may be purchased for a small sum and any local artist will be glad to give you instruction.'

"At the least, every physician is able to develop a sensitiveness to and an appreciation for fine art. He can also cultivate a hobby which if not one of the fine arts, is in the class of 'work by the side of work.' Dr. Charles A. Dana, who has always stressed the value of cultural medicine, has advised: 'Be a collector, for example, of stamps or automobiles, or old books, or neckties or pins; or find diversion in some collateral branch of science; the lore of birds, of fishing and shooting. Make a garden or cultivate shrubs and flowers. These kinds of activities will make your life happier and your professional character more attractive and effective.'"

—Quoted from "Parergon," published by Mead Johnson & Company, Evansville, Ind. Free copy available on request.

RANDOM THOUGHTS OF THE SECRETARY

April 22nd. To the great delight of Arnold, Chamberlain and Foltz, we report the fact that an X-ray tube of ours serves its time. We emphatically register the statement, however, that this was not due to throwing 100 MA into a 10 MA tube, although we well realize that this will meet with the utmost skepticism.

April 23rd. Meeting the family at Oklahoma City, returning as refugees from allergy at El Paso, we see a small portion of the celebration of the Run of 1889, a colorful day for the Oklahomans and a proper tribute to their pioneers. Wondering about pioneers and deciding that a pioneer is one who is going some place and intends to get there, a spirit which is undaunted even in these days. Much room exists for pioneering in medicine and, particularly, in the distribution of medical services.

April 26th. Lunching with the Holt-Krock clinic where the new X-ray unit is demonstrated, especially designed for Arnold's use with an automatic tube protector. Among the advantages which we discover accompany group practice is that all clinic members have two sandwiches; we have but one.

April 27th. Increasingly of late have we noticed that those of their fair sex for whom we open office building and other doors, pass on through with not as much as a smile or nod of the head in acceptance of the courtesy. After all, does not courtesy in its literal sense imply that the act will be similarly received?

April 28th. What a modest disclaimer that man Hitler! Now, he has no designs on the United States!

April 29th. Habits formed by participation in a sixty-day legislative session are broken with difficulty by neophyte statesmen. Ultimately, they acquire more wisdom and thoughtfully consider their public utterances in advance.

May 2nd. In his best guest speaker manner, Goldstein addresses the county society and convincingly shows that it is well that we practice what we preach and encourage local talent to make the programs.

May 4th. The itinerant crippled children's clinic comes to town, Parmley, Shuffield, Newman, Wallis, Parsons and Gay, finding us unduly busy with professional matters, to the extent that we find the opportunity only to visit with the group at luncheon.

May 7th. Journeying once again via Mount Ida where highway construction goes apace and dust rises to new levels and density, grateful to reach the Arlington. The preliminary arrivals seem to be fewer in number than ever before but we do not lose confidence that this will be a well-attended meeting. To barbecue dinner with the Wootton's and the Smiths, a festival which is said to have originated in a remark of ours. If so, we shall make remarks anew when the Society next contemplates a session in Hot Springs National Park. Away to meet with the Committee on the Need and Supply of Medical Care, to whom we publicly give accolade for the acceptance of a most difficult assignment, and for its most successful accomplishment, we give highest acclaim. Late to the Southern Grill which should be famed for its creole gumbo as well as for other items, where we carry on much talk with the seldom seen Mrs. A. G. Sullivan, and with Charlie and Frances Chamberlain, Al and Madge Smith, Woolsey, and the ubiquitous Parmley.

May 8th. We act as registration clerk to get the 64th annual session under way and are more than pleased with the way the members line up before nine o'clock to register. Flowers to O. H. King for cheerful assistance at registration. Sam Thompson, bearing in mind comment from this column two years ago, appears in a felt hat. Sullivan, taking a most unusual part in the business session, reads two reports, both as a proxy. Meeting Dewell Gann, Jr., and Barton Rhinehart in earnest conversation, it comes over us that they are discussing the same book. Fishbein bounces in on the scene, this time offering us cheer in that we are able to pass on a new story to him. For the record, there was a public meeting this night. Later, Bowman and Foltz relive four years in medical school with us, Foltz not preparing for this conversational marathon in the accustomed manner and, regrettably, making less than usual out of the incidental repartee.

May 9th. The general session goes along in good form, delayed in spots, but the morning session comes out only about thirty minutes late. Our activities are about as numerous as usual, coming to the rescue of the EENT group with a spare lantern, looking for Hansel Preston, being three places at once, but finding considerable fun in all the things that are to be done. Marveling at the continued esprit among the urologists, Jones and Reagan giving Pennington a pat on the back for his presentation, which should encourage this newcomer to greater endeavors. More than casually alarmed over the emphasis placed upon degenerative diseases this day, the most frequent cause of mortality within the profession. The evening banquet is distinguished by the invocation so charmingly said by Miss "M," the introductions by "Pop" Wootton, and the unexpected ability as toastmaster which Stough presents. The banquet and dance done, we must needs listen to the supposed harmonizing of an accidental quartet, Wolfermann, Sullivan, Gilbert, and Parmley. Tactfully host and hostess are able to divert these talents into simple, (relatively so), conversation.

May 10th. Sid steps down but a long ways from out. Ten years a councilor, one year a president-elect, one year a president, he has given freely of time, talent and energy to the betterment of this Society. Within bare bounds of human limitations he has answered every call made upon him for the good of organized medicine, has fought tenaciously for what he deemed its better interests, and has made many friends while so doing. Far more tribute than these words is justly his, yet we are thankful that our office has permitted us a more intimate association with him than has been accorded others. Through these years working side by side, we have learned and profited greatly. A parting salute to his years of service but a denial that his work is ended with the Arkansas Medical Society. There must be a special section of Valhalla reserved for these unselfish, earnest workers in the cause of the organized medical profession.

May 10th. This day the youngsters in initial presentations before the Society, as the day before, give every promise of good papers from the membership in the years to come. Pausing to commend Crigler, Wilson, Harris, Bogart, Shipp, and Reaves for good jobs well done. On through the day to final adjournment departing sorrowful that it must be a full year until this great gang gets together again.

May 12th. We discuss the Wagner Act as it relates to hospitals at Sparks Memorial Hospital this day and hope that we have made a good point of the fact that need exists at this time for governmental support of our

existing institutions by making payment for the care of the indigent, rather than by building additional hospitals. With a percentage of occupancy in 1938 of less than 70%, it seems obvious to any thinking person, that stability and efficiency of operation could be assured our existing hospitals were cost of indigent hospitalization assumed from tax funds.

May 13th. Today's mail brings 20 enrollments for the obstetric refresher course and we sincerely trust that our return from Saint Louis next week will find the desk covered, that is, more covering for an already overloaded desk top, the bottom of which we expect to reach in August. In the evening we attend the Cooper Clinic party where Louis Rudolph speaks in a practical manner of constriction rings, a subject most foreign to radiology, yet in the after session we are able to speak with some semblance of authority on the themes presented.

May 15th. Registering early with mine host Heiss at the Mayfair, then about the various lobbies, meeting Kilbury and Melson at the Jefferson, here so long now that they are citizens. The New York state delegation affords the major discussion conflict of the day with their resolution on the affiliation of colored medicos and the reference committee hearing this afternoon hears every state south of the line. With no proponent of the resolution the inference is drawn that perhaps the Empire State is but passing the buck. The Saint Louis County Society entertains at dinner with a well-staged satirical puppet show and there is much of merriment. Loran, the affable factotum of the Southern, intent on details and mayhap the Memphis session will show the results of his study of this entertainment feature. A short visit later with Kell Vaughn, who knows Bob Robins well indeed, and who shows, upon short acquaintance, remarkably similar traits.

May 16th. We acquire some prominence by our speedy support of the motion continuing the grandfather clause for the purpose of membership qualification. The afternoon free, we wander about the technical exhibits, registering for a free Fair trip and a Mennen kit, both of which we shall no doubt win. Visiting shortly with Grayson, Lynn and Goldstein and hearing reports of the doings of others of the Arkansas delegation. We disturb Goldstein with tales of stolen cars from parking places and he continues about the exhibits in a quandry. This evening chatting with Lutterloh and Al Smith, acquiring the information that the rheumatic organization has dropped its euphonious title, possibly for the reason that the study of the condition offers nothing further in this life.

May 17th. A free morning is spent at the scientific exhibit where young Miles Foster discusses learnedly on air myelography of the spinal cord and where Hawkins thanks us for saving his tissue forceps from the grasping Parmley at the close of the state meeting. And again would bob up the question of open membership at the afternoon session of the House. Can it be possible that this is an organized campaign? Everett Moulton moves in on us and meekly takes over a section of the room. Accepting Luzier's hospitality for a short interval, hearing the tale from his sales force that some Arkansas women do not wear shoes but that they do buy cosmetics, to which we quite naturally reply that footwear is no concern of a cosmetics manufacturer but that advertising in the Journal does pay. Then with the talkative Ellingwood of Maine and Moulton, more talka-

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tive than usual, we hear of many and divers things in the Statler lounge.

May 18th. Comes the closing sessions of the deliberative body of the A. M. A., the negro question again presenting. Should this ever appear again, we shall ask the delegates to bear in mind that membership in the county medical society is necessary for a wife to become a member of the Auxiliary and that perhaps it would be well that the Auxiliary be consulted. Tarrying long enough to cast a final vote on the 1942 convention city after having beaten Alabama and Tennessee to the nomination of Olin West, our first success in this. Thence away to ride with Fred Heeren, the genial steward of the Scenic Limited to Colorado, with whom we have ridden many times across Kansas and to Denver, this time taking leave of the Colorado-bound train and heading south from Kansas City on the Kansas City Southern, one of the trials accompanying this ride being the 4:30 A. M. arising hour out in Oklahoma, but which gives us a good start for the day at home.

May 21st. Confined to the house these past two days with various aches and pains, a swelling of the right malar region, a constant coryza and a most prominent and reddened right nares, the scientific appellation of which is not easily ascertained, but the lay appraisal, "a helluva fix," most fitting. Becoming more or less accustomed to this new state of affairs, we suggest our retirement at this stage, to which Peggy agrees only with the stipulation that we travel—alone.

May 22nd. Back on the job and if you have addressed us a letter in the past ten days, please know that this is in part an alibi for the lack of answer.



MRS. C. E. KITCHENS
DeQueen

President, Woman's Auxiliary to the
Arkansas Medical Society
1939-1940

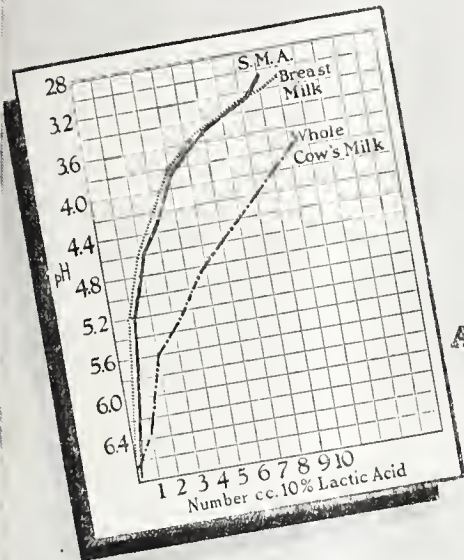
THE DOCTOR'S WIFE

Many patients object to a doctor's wife knowing too much about them, and more than one doctor has lost practice by getting a reputation for discussing his patients with his wife. It is usually best from the beginning to leave your professional problems behind you when you go home, and never to talk about patients with your wife. There are at least two reasons for this: first, because it gives a better chance to relax and recover from the strain of the day's work. second, because it is not wise to train your wife to expect a recital of your patient's troubles. The same advice applies with greater emphasis to your relations with friends. If one friend learns that you are in the habit of discussing with him the intimate details of your patients' lives, he will very naturally conclude that when he is sick he will likewise be a topic of conversation for your other friends.—Wingate M. Johnson, M. D., page 135, "The True Physician," The Macmillan Co., 1936.

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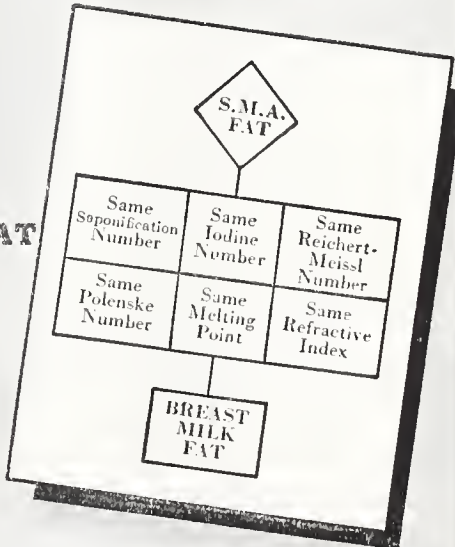
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BOOK REVIEWS

The Vaginal Diaphragm. By Le Mon Clark, M. S., M. D. Pp. 107. 53 illustrations. Price \$2.00. Saint Louis: C. V. Mosby Company, 1939.

This monograph should be on the desk of every man who attempts to advise women as to the use of contraceptives. It not only is written in such simple language that the layman could understand, but the pictures, drawings, illustrations, and diagrams are of such a nature that the layman can be better instructed in the use of the diaphragm. This book on technique is certainly the latest and best that has been published on contraceptive methods.

Diseases of the Nose, Throat and Ear. By W. Wallace Morrison, M. D., Clinical Professor and Chief of Clinic, Department of Otolaryngology, New York Polyclinic Medical School and Hospital. 675 pages with 334 illustrations. W. B. Saunders Company, 1938. Cloth, \$5.50 net.

The subject-matter is most completely covered for a single volume text. Practically all the newer methods and thoughts of the specialty are included. The concluding pages of the book contain, in addition to a general index, a unique and valuable symptom index. There is also a formulary of prescriptions. The text is greatly clarified by three-hundred-forty-four line drawings, all adequately labeled. Many of these are semi-diagrammatic and serve particularly well in the sections on operative procedures. The book is well worth having on hand and should appeal to any practitioner interested either directly or indirectly in oto-laryngology.

Urology. By Daniel N. Eisendrath, M. D., Consulting Urologist to the American Hospital, Paris, France; and Harry C. Rolnick, M. D., Attending Urologist, Michael Reese, Mount Sinai and Cook County Hospitals, Chicago. Pp. 1061. 750 illustrations. 12 color plates. Fourth edition. Price \$10.00. Philadelphia: J. B. Lippincott Company, 1938.

The first three chapters concisely explain and illustrate fundamental principles of anatomy and physiology. Four chapters are given over to a discussion of various instruments and X-ray examinations. The description of laboratory methods and the various forms of anesthesia is adequately presented. Nephritis is fully presented as

a condition of importance to the urologist as well as to the internist. Full operative detail and comprehensive discussion of all urological pathology is most satisfactorily included, as is a final chapter on postoperative complications. This is one of the best works on urology, equally valuable to the student, the general practitioner and the specialist.

Clinical Gastroenterology. By Horace Wendell Soper, M. D., F. A. C. P., Saint Louis. Pp. 314. 212 illustrations. Price \$6.00. Saint Louis: C. V. Mosby Company, 1939.

The subject of gastroenterology is concisely presented by one who has had an abundant experience in the field. Reproductions of roentgenograms in large number materially aid in the presentation of the subject and the appended case histories. The book is practical and will be of great help to the general practitioner.

Anemia in Practice: By William P. Murphy, A. B., M. D., Associate in Medicine, Harvard Medical School; Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston; Consultant Hematologist, Melrose Hospital, Melrose, Mass. 344 pages with 41 illustrations. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$5.00 net.

This is a practical and comprehensive study of hematology in which the author suggests a simplified classification of the anemias into three main groups: 1. Hypochromic anemia, with a short description of the blood picture and clinical picture, and treatment consisting of iron and diet. 2. Normocytic anemia, is discussed as to association with the blood destructive agents, but the treatment is not definite in the author's opinion. 3. Pernicious anemia, discussed as to its association with the gastro-intestinal tract and the neural system, the marked continued destruction of blood and the degeneration of the viscera. Treatment is discussed as to the use of liver therapy. He then discusses the complications occurring in pernicious anemia, the differential diagnosis, and gives a chapter on the practical management of the patient and the choice of method of treatment. The author then takes up the physiology of the blood formation and gives a concise and useful chapter on laboratory procedures. This book consists of 325 pages, is inexpensive and is a good, practical, working text.



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Modern Hospitalization of Nervous and Mental Illnesses, Alcoholism and Drug Addiction.

THE ROBINSON CLINIC

G. WILSE ROBINSON, M. D.
G. WILSE ROBINSON, Jr., M. D.

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PAINFUL NEPHROPTOSIS AND ITS TREATMENT*

JEFFERSON C. PENNINGTON, M. D.
Nashville, Tennessee

Definition and Degrees. By painful nephroptosis we mean that the kidney has fallen out of place to such an extent that the ureter is partly or wholly blocked thus causing pain from retention of urine in the kidney pelvis. It is difficult to specify accurately the degrees of nephroptosis, other than to say moderate or extreme. We are not particularly concerned with the degree except in the painful case. It is well known that there are many cases of marked nephroptosis without symptoms.

Occurrence. According to J. T. Robinson in his experience and the statistics he has gathered from the literature, nephroptosis occurs ten times as often in the female as in the male. It also occurs ten times as frequent on the right as on the left. A case is seldom or never encountered below the age of twenty-five or after the age of fifty. In our series the youngest was 18 and the oldest 64.

We may consider that there are two main reasons why it occurs more often in the female. The first is because of the general relaxation during pregnancy. The second is because the muscles and other tissues of the female are usually not as strong or as well developed as they are in the male.

Causes. a. Liver pressure is sometimes thought to be the cause of nephroptosis on the right, when the liver is enlarged and presses the kidney downward. b. Relaxation during pregnancy is often attributed as the cause of nephroptosis on one or both sides. c. It is supposed that stones in the kidney will either cause obstruction thus bringing about a heaviness of the filled kidney pelvis the weight of which the supporting structures are not able to hold. Personally I have seen very few in which I thought

stones were the cause. On the other hand, I was inclined to attribute nephroptosis as the cause of the stones. d. Strictures have been attributed as the cause of nephroptosis for the same reason as stones. e. We have seen a few cases of painful nephroptosis which gave a history of symptoms having begun at the time of an injury. The injuries listed in our series are those caused by sitting down very hard; being struck in the kidney region by a baseball; being struck in the kidney region by a knee while playing football; being run over by an automobile; being kicked by a horse; falling out of an automobile and striking the kidney region against the curbing; and falling on a milk bottle; and being stomped in the kidney region. In these few cases who state their symptoms as beginning at the time of injury, a good many of them said they had hematuria immediately after the injury. A few of them state that extreme soreness began immediately after the injury and within a few hours they suffered with renal colic; some passing blood, others, not. f. General visceroptosis is often seen with bilateral nephroptosis and is usually considered congenital. g. The pressure of a blood vessel across the ureter is attributed as the cause in some cases. h. In most of the cases we have seen no direct causes could be assigned.

Symptoms. These may be divided into two parts; those directly attributable to the genitourinary tract and those not directly attributable to the genitourinary tract. The genitourinary symptoms found in this series are: pyuria, hematuria, frequency, dysuria, Dietl's crisis, pain in the kidney region, jarring pain in the kidney region when walking, pain after voiding, dragging pain in the side when standing, pain in urethra, stabbing pain in bladder, pain in bladder region, urgency in daytime. The non-genitourinary symptoms observed are chills and fever, nervousness, backache, nausea, vomiting. These may occur in various combinations. The third group of symptoms is a combination in various forms of the first two groups.

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Diagnosis. a. Symptoms are prerequisite in this group of cases because we are not dealing with the asymptomatic patient. b. Palpation alone, except under rare circumstances, should not be considered as a diagnosis, because, as previously noted, many kidneys which are down out of normal position do not give any unfavorable symptoms. c. X-rays are usually very essential in getting the correct diagnosis. Preparation of the patient for X-ray is very important. If there is gas in the intestines, it usually renders X-ray examination of the kidneys worthless. Therefore we administer a good gas-removing preparation the night before the X-ray examination, and where convenient give an enema, and let the patient go without the meal preceding the exposure. Plain X-rays are essential for the ruling out of visible stones which might become invisible if a pyelographic medium is present. Intravenous urography is a misleading procedure and often a disappointing one, except in the hands of one who is skilled in both intravenous and retrograde urography. In no case is it as certain to be free of errors as retrograde urography.

X-ray Technique. We believe that the best technique is to first make a flat plate without the presence of any pyelographic medium; second, inject the pyelographic medium and make a flat plate. Third, put the patient in the almost erect position and, in case of retrograde pyelography, pull the catheters almost out of the ureters. We usually take our films in each of these positions on expiration. However, if one so desires, it will be found a valuable study to take a film in each position both on expiration and inspiration. Thus he will be very apt to get the true excursion of the kidney.

Treatment. It may be divided into surgical and non-surgical. Surgical treatment is entirely useless in the case of visceroptosis, and in the case where the viscera are not ptosed, but both kidneys are ptosed, it is a pretty big dose of surgery to operate on both sides.

Methods of Surgical Treatment. a. One of the oldest methods is to put sutures through and through the kidney and hang it up to the fascia. This has been abandoned because through and through sutures cause a certain amount of kidney damage and in some cases resulted in stones being formed with the sutures as a nucleus, or in suture abscess. b. Another method is to open the capsule in such a way that the upper half can be rolled back the same as rolling a

cuff. Then the sutures are placed in this rolled cuff of capsule and passed through adjacent fascia. c. Another method is to pass ribbons of catgut through the capsule in such a way as to firmly anchor the kidney in a basket like suspension, then tie the ribbon catgut above into some suitable fascia. d. Still another method in vogue in some localities is to stab through the central part of the cortex and then pass a Pezzer catheter to the pelvis of the kidney. Thus, when the tip of the Pezzer catheter expands, it will act as a lifting arrangement for the kidney and then the catheter is pulled upon and tied firmly to the skin in such a place as to elevate the kidney to the desired position. In two or three weeks the catheter is pulled out and the sinus usually heals rapidly.

I have used all of the above methods and found none of them necessary. What first gave me the idea that none of them were necessary was the fact that in some cases where we had done pyelotomy and nephrotomy for stone and did not do nephropexy these kidneys were found to be in normal position on later dates. When surgical procedure becomes necessary we prefer simple scarification. The ordinary kidney incision is made and the kidney is freed of all adhesions. If any aberrant blood vessels are found these are tied off and cut. The capsule is split in numerous places and an occasional piece of capsule removed. The kidney is then restored to the desired position, the patient placed in Trendelenburg position and kept in this position for three weeks after returning to her bed.

The non-surgical treatment consists of wearing of a properly fitted belt. a. Kind of belt. The material should be firm and light, washable, and without elastic. The pads should be of the size and consistency suitable to the patient, and should be placed with reference to the individual needs of the patient. The belt should have adjustable straps and buckles, should always be tightened from the bottom upward, and should be held down on the female with supporters attached to the hose. On the male, it is held with straps between the legs. Precautions in wearing the belt. 1. It should be fitted for comfort. 2. The patient should understand that adjustments are necessary the same as adjusting the harness for a mule is necessary. 3. Patients must get accustomed to the belt the same as one has to become accustomed to wearing glasses or false teeth. 4. The patient should not sleep in the belt, but should put it on each morning while

lying in such position as to have the hips and legs higher than the head, and as I have said before tightened from the bottom upward. 5. Heavy lifting and high reaching are forbidden because they destroy the desired relation between the belt and the abdomen. If the patient can arrange to sleep alone it is well for him or her to sleep with the foot of the bed elevated and to lie on the back as much as possible. 6. It is possible to relieve many cases of renal colic temporarily by placing the patient in Trendelenburg position.

According to our records we have successfully relieved more than 95% of our cases of painful nephroptosis by the wearing of kidney belts. The usual minimum time required is six months. We find that the female patient becomes fond of the belt and as the patient says, "Uses it as a back rest." Many of our patients have had new belts made of the same kind when the old belt wore out. 8. There are a few patients who cannot wear belts, or who do not wear them, and it is these on whom we do surgery.

Reasons why some patients cannot or do not wear the belts are as follows: 1. Mal-shaped bodies due to such things as curvature of the spine, excessively prominent iliac crests making a deep space in the abdomen. 2. Neurotics, notably spayed women. Many such women can become adjusted to wearing a belt satisfactorily if properly treated with ovarian extract.

Summary—

- a. Nephroptosis may or may not cause discomfort.
- b. Painful nephroptosis occurs more frequently in the female, most frequently between the ages of 25 and 50.
- c. In most cases, no particular incident in the history of the patient can be ascribed as the cause.
- d. The symptoms are varied and often vague.
- e. Diagnosis is best made by retrograde pyelography.
- f. The wearing of a properly fitted kidney belt will cure the vast majority of cases in which the diagnosis is correct.
- g. Skill is required in properly fitting a belt and accurate supervision is necessary for successful wearing of a kidney belt. Neurotics require special attention.
- h. A few cases of painful nephroptosis cannot or will not wear a belt successfully and must resort to nephropexy.

TREATMENT OF NON-INSTITUTIONALIZED CASES OF PELLAGRA: WITH CASE REPORTS*

C. N. BOGART, M. D.

Forrest City

Pellagra is a disease that has been of major clinical importance in the United States since 1907. It was in that year that the first cases were reported here. Until then it had been found only in southern Europe and Egypt. Soon after the first appearance of the disease in this country it seemed to take on an epidemic form in the South where it was apparently confined, until in recent years when cases began to be noticed in other sections. Now it is known in every section of this country as well as in all others. No doubt, the reason it has only recently been found in the north and eastern United States is because it was not suspected and was classified under some other name. Even today, it seems to be reluctantly recognized in other parts of the United States. In some places it is still thought of as being due to filth and unclean living rather than to a deficiency in diet, and as found only among the southern negro population.

Shortly after its recognition here it took on a seriousness that attracted the attention of the U. S. Public Health Service and in 1914 Dr. Goldberger was sent into various southern states to study the disease. His most consistent finding was that it appeared in people who were on a limited diet, and he was the first to advance the theory it was due to a dietary deficiency. Formerly it was believed to be due to eating contaminated grain, especially maize. It was believed that there existed some corollary between the causative agent of pellagra and the formation of ergot on wheat. This theory had persisted since the disease was first described in 1735 in spite of the fact that it was found in any number of people who did not eat the supposedly contaminated foods, and further that it was rare among the native Indians whose diet consisted largely of maize.

Goldberger believed there was a factor in certain foods, the lack of which caused the disease. He advocated the eating of lean meat and eggs and drinking milk along with vegetables as a preventive. That concept still holds today, as the disease is rarely found in persons

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who have an adequate diet. I say, rarely, because it is found in others. In these cases, however, it is secondary to another disease that causes a limited intake of food, a faulty assimilation of food, or, in some cases, a self-limitation of diet either as the result of alcoholic intake or in some mental cases that imagine they can not eat as they should. Goldberger also advocated yeast as a preventive and curative measure. In actual practice the amount of yeast taken in the average case has been too small to prevent recurrences of the disease or cure the existing symptoms. It is common to hear sufferers say they have taken yeast without benefit, but when the actual daily intake is estimated it is rarely found to exceed one ounce. I do not believe that amount of yeast will bring about a cure in any except the very lightest forms of the disease, and I doubt that it will prevent the recurrence of the disease in an old pellagrin. Arsenic was also advocated in treatment. Its action has never been determined so far as I know. In the last few years liver has been mainly used in the treatment. The less concentrated forms were found to be effective in treatment and cure, while the very concentrated ones did not have any effect.

The pellagrous patient is one of the most difficult to treat, and until recently, about the only means of bringing about an improvement, or cure, was to place them in a hospital before the disease had progressed too far. In the more advanced cases death was very likely to be the outcome regardless of institutional treatment. After the patient had progressed to a stage of severe dermatitis, with the extremely raw mucous membranes and the marked gastro-intestinal symptoms, not to say anything of the frequent dementia which accompanied these symptoms, there was very little that could be done. We have all seen cases of pellagra die for whom we thought everything possible had been done. Textbooks of only a year or two ago state that the disease progresses from year to year, gradually becoming worse, until death results, either from the pellagra itself, or some intercurrent infection, often pneumonia. The average case was treated while ambulatory and only after the disease had become quite severe were they hospitalized. In some this brought about a change for the better and the patient remained alive a few years longer, but with the majority, it was only a short time until they died. Too, the ambulatory cases apparently successfully treated were

only relieved, but for a short time. Of course, all this was due to the fact that the deficiency continued to exist. In addition, the mental attitude of the pellagrin causes him to fall back into the old routine; they are depressed and suspicious, and when an attempt is made to force food on them it is met rebelliously. In some the insanity is the most noticeable symptom.

Although this paper deals with non-hospitalized patients, I do not mean to imply that all cases can be successfully treated outside of an hospital. Careful nursing is as essential today as ever and is especially needed for the mental cases. It is also essential for all cases insofar as dietetic requirements are concerned. Unless they are carefully supervised, little can be expected from treatment. Still, in the last eighteen months it has become possible to treat a great many more of the patients while ambulatory than was formerly the case. Yet to give an outline of diet and a prescription for a little medicine, then allowing these people to go their way, is to invite complete failure in effecting a cure. The need for careful watching and the continued insistence on the proper diet cannot be sufficiently stressed. There should be some person of responsibility placed in charge of each case, who should have some understanding as to the cause and prevention of the disease. This need not be a trained nurse or dietitian since in the average family some member can be chosen and instructed in the fundamentals. This does not apply to the families of lowest income in which pellagra is most frequently found. Any of you who have a large negro practice know how impossible it is to get them to continue any form of treatment after a little improvement is shown. In that case all we can do is the best we can. We may partially overcome this failing by insisting that they come back at regular intervals for personal observation. We must remember pellagra is not a disease that can apparently be cured and then forgotten. Experience has all too often shown that it has a strong tendency to recur. This is, of course, due to the fact that there is a lapse in dietary routine without any thought of prevention. The cases reported in this paper were treated outside of an hospital because there was no difficulty in having someone take charge of the management. In no case was the pellagrin responsible for the management of his case.

In 1937 the introduction of nicotinic acid in the treatment of pellagra placed in the hands of

physicians the first drug that has any specific action in the disease. It is through the use of this drug that so many cases have been successfully treated since that time, either in or out of an hospital. In a large series of cases reported from various sections of this country and abroad, this drug has proved that it is by far the most important one we have. Its use will quickly cause a disappearance of the skin, mucous membrane and mental symptoms; in the majority of cases, within a few hours. By bringing about this improvement the patient may be more quickly placed on a full P-P diet. Formerly it was necessary to carry out a long-time program of hospitalization before they were able to take an approximate curative diet, and only by a slow process of gradually increasing the diet, was it possible to get them back to a normal state.

Nicotinic acid was first extracted from nicotine in 1867 and it is from this source the name was derived. It has since been found in rice polishings, yeast and liver, as well as in other foods. It can now be prepared synthetically. After it was found in yeast and liver, two of the most important foods in the management of pellagra, experiments were begun to determine its place in the scheme of foods. It was found to bring about a quick cure of experimentally produced black-tongue in dogs. As this disease has long been considered closely related to pellagra it was but natural to try it in humans as soon as the toxicity could be fairly well established. The results were so striking that it was quickly accepted and used in treating the various forms of pellagra with experiments conducted to determine its value.

To date it has been used and reported in practically every phase of pellagra and its comparative worth established. However, its greatest clinical trial is now in progress; it is being used in Spain where pellagra is almost pandemic. The results obtained by its use there will, no doubt, determine the exact value. Without further experimentation, however, it has been used successfully in sufficient cases to warrant use in every case of pellagra.

The physical properties make for ease of administration. Even in those who have such extreme symptoms of the mucous membranes as to prevent swallowing and in those who vomit everything, it can still be given. It is soluble enough in water to permit the administration of an adequate dose intravenously. The need for

giving the drug is adequate dosage must be emphasized. It has been shown that with a dose too small, the patients improve somewhat for a few days, then suffer a relapse with more severe symptoms than they at first. The exact dose has not as yet been determined, but it may be stated that if given by mouth 500 mgs. daily will prove sufficient, while if given intravenously, 100-200 mgs. will give the same results as the 500 mg. oral dose. This is due to the fact that the drug is relatively hard to put into solution and it probably passes through the intestinal tract before solution is complete, thereby calling for a larger dose when given by mouth. In oral administration, it is better to give ten 50 mg. doses daily than to try to give five 100 mg. doses daily. The majority of patients receiving the larger dose complain of burning and itching of the skin and of a flushing within a few minutes. These symptoms soon disappear and cannot be considered as contra-indications. Some of the patients complain quite severely of this unpleasantness. Too large a dose may be given which produces nervousness, nausea, vomiting and mental depression. This is not likely to happen in actual practice as it has only been noted after very large doses such as 500-1000 mgs. administered in a single dose.

The exact pharmacologic action of the drug is not yet fully understood although it appears that there is some endogenous substance contained in the stomach that is necessary to its utilization. Experiments have been conducted on dogs and pigs from which the stomach had been removed and pellagra produced. If these animals are given a pellagra producing diet and nicotinic acid alone there is no improvement and the animals soon die. However, if they are given an extract containing the stomach enzymes, or the ground, dried stomach, they show satisfactory improvement.

To my way of thinking this drug produces the most spectacular results of any we have today. It even surpasses the muchly discussed sulfanilamide and sulfapyridine. Reading reports of the changes it effects within a very short time, often sounds like a page taken from a patent medicine advertisement. The change that takes place in a very ill pellagrin after the administration of a few doses of nicotinic acid can hardly be credited without personal observation.

But right at that point is where we, who are in the actual practice of medicine and not in the experimental field, must take ourselves in

hand and not become too enthusiastic, for in our enthusiasm over the results obtained by this one drug we are liable to allow ourselves to be led into a sense of false security, and allow these patients to suffer from deficiencies equally as bad as that from denial of nicotinic acid. These patients are not suffering from the lack of this drug alone, but it may be reasonably stated, from the lack of the entire vitamin B complex. This is not only true of the B complex but applies to the other vitamins as well. Symptoms may be present or develop while adequate doses of nicotinic acid are being given where too much reliance has been placed on this drug alone and not enough on the other vitamins and the food intake. It is now known that the burning of the feet and legs, the neuritis, that accompanies pellagra is not due to the lack of nicotinic acid, but is due to a deficiency of vitamin B1. These patients will continue to complain of these symptoms until adequate B1 is supplied, either in the form of food, or better still, as synthetic thiamin chloride. No doubt, there is also a lack of B2, as the majority under close questioning will state that their eyesight is not as good after the development of the disease as before, a condition which improves after B2 is supplied. Prolonged lack of riboflavin tends to cataract formation, and this is probably the case in pellagra. Part of the diminution of vision, however, may be due to a lack of vitamin A, which we know is the vitamin affecting the formation of visual purple. As for vitamin C deficiency, any number of cases of pellagra can be seen in which the dermatitis is not at all typical but appears to more hemorrhagic. I believe this is due to vitamin C deficiency and not to the pellagra per se.

So, even though nicotinic acid has proven of so much value in this disease, we cannot rely on it to the exclusion of all other factors that must be considered. It has, however, given us a means by which we may more quickly dispose of the more distressing symptoms and start the patient on the right road of dietary requirements.

The routine of treatment used in the cases reported here was about as follows: 500 mgs. of nicotinic acid was given daily, usually in doses of 50 mgs., but in some instances the 100 mg. dose was used, or the two doses alternated. This was begun as soon as the diagnosis was made regardless of the severity of symptoms. In this way I was able to get a more complete cooperation both from the patient and the family;

which is of considerable importance in treating these cases. The results exhibited by two or three days of treatment shows that the patient can be helped. The rapid disappearance of the skin and mucous membrane signs and a lessening of the disagreeable intestinal symptoms tends to establish a sense of confidence and make patients willing to follow almost any routine of treatment. As soon as possible, usually within two or three days, they are placed on a full P-P diet consisting of plenty of meat, milk and eggs along with vegetables, and as many of the raw vegetables are used as possible. Vitamin B1 is given daily by injection in doses varying from 1 to 12 mgs. depending upon the severity of the neuritis. Vitamin C is given in doses of 200-600 mgs, daily as cevitamic acid. And vitamins A and D are given in the form of a Council Accepted perle or drop, usually 30 drops a day being used. Fluids are given in large enough amounts to combat the dehydration. After one or two weeks of this routine the vitamins in the pure state are eliminated and yeast substituted, except for the nicotinic acid, which is continued in a reduced dose depending upon the general condition of the patient. When yeast is substituted for the other vitamins it is insisted that the patient receive at least four ounces daily, preferably six. It may be mixed with milk or given along with one of the breakfast foods.

In every case an apparent cure was effected in two weeks. By apparent cure I mean the cardinal signs of pellagra had disappeared even though the patient might still be very weak and unable to be out of bed. Any indication of a relapse was immediately met with a return to the synthetic vitamins and an increase in the dose of nicotinic acid.

The cases reported were all private cases, not charity; they were all able to buy the necessary medicines and foods. It is noteworthy that pellagra appears in this class of people, although in these cases the pellagra was usually secondary to some other disease, and in one case to a peculiar trait of mind.

1. Mrs. H. M., white, age 55, housewife, had been under treatment for anginal heart failure for seven years. In the last two years the failure had become congestive in type due to a thrombosis. After the congestive failure set in she began to have upper right quadrant pain which she accredited to various foods. Consequently she had reduced her diet below the necessary requirement. In May, 1938, she developed symptoms of pellagra, sore mouth, a tendency to diarrhea and abdominal cramps in spite of opiates, loss of appetite and

some burning of the bottoms of the feet. The only skin sign was an area of dermatitis just below the left elbow about two inches wide and four inches long; it was not a typical lesion of pellagra. Nicotinic acid was begun in doses of 100 mgs. every 4 hours. As she complained of the sensation of heat and prickling that accompanied each dose of the medicine the dose was reduced to 50 mgs. and given every 2 hours, which did not cause any of the unpleasant sensations except upon one or two occasions when the stomach was apparently empty at time of ingestion. Within forty-eight hours the dermatitis had disappeared and there was no longer the tendency to diarrhea, nor the rawness and burning of the mouth. A more complete diet was insisted upon and the other vitamins given as a supplement. There was a slight improvement in the heart condition, no doubt due to the action of the B complex. The patient lived six months longer and enjoyed apparent better health until another thrombosis caused death within a few hours after its onset.

2. Mrs. R. C., white, age 46, housewife, was first seen in April, 1938, complaining of severe sort throat, burning of feet and legs and diarrhea. The condition of her mouth was such that she could only take water by mouth, solid foods causing such pain as to forbid them. There was an accompanying mental depression. The dermatitis consisted of several purplish areas of discoloration of the forearms and legs. The skin was dry throughout in spite of marked edema. Her history disclosed she had suffered from a nephritic type of hypertension for ten years, and had been on a reduced diet for the past two years because of nephritic symptoms that persisted. Her blood pressure was 240/118; pulse 102; the urine was acid, albumin 3 plus, no sugar, 3-5 pus cells to high power field in the uncentrifuged specimen, and full of casts. Nicotinic acid was given in doses of 50 mgs. every two hours. For the first 24 hours that was about all she took. Thiamin chloride 6.66 mgs. daily was started on the second day, with 30 drops of cod liver oil, and 400 mgs. of cevitic acid. On the third day she was able to take some food by mouth and a low salt diet was prescribed. At the end of a week there was a great deal of improvement noted, the skin and mucous membrane was clear, with some residual signs of the inflammation in her mouth. The burning in the arms and legs were much less discomfiting but still present at times. There was a marked clearing of the mentality. There was a noticeable increase in urinary output; the edema became less, and the blood pressure dropped about ten points. No doubt, a good part of her edema had been caused by protein deficiency rather than to the nephritis. In six weeks she was again able to do some of her house work even though the blood pressure remained around 230/110 and the urine still contained albumin and casts. She has continued in this state until the present time.

3. Mrs. H. Mc., white, age 78, widow, had pellagra every year since 1934, and had been treated by the usual methods with the usual results. In May, 1938, she noticed a beginning reappearance of the disease even though she was taking about an ounce of yeast daily. She was placed on nicotinic acid, 100 mgs. every four hours, with an immediate disappearance of all symptoms. The only remaining sign of pellagra was the discoloration of the skin from former outbreaks. She became more satisfied and her general mental condition was much better. Due to her age and necessity for a reduced intake she was kept on a maintenance dose of nicotinic

acid, 50 mgs. three times daily until late fall. She has had no return of symptoms so far this year and has taken no nicotinic acid since last October.

4. Mrs. S. A., white, age 39, housewife, had her first indications of pellagra in June, 1938. She was suffering from a typical case of pellagra, brought on by self-limitation of diet. She is an hypochondriac and is convinced she is suffering from some disease about which the profession is ignorant. We have all had experiences with her kind, one of those who is constantly "going through the clinic," and she has been through just about all the clinics within her reach; having been treated for any number of different diseases. She carries the constant dread of food, she imagines everything she takes hurts her, and as a result she is starved. This starvation produced a fulminating case of pellagra. She was given nicotinic acid in doses of 50 mgs. five times daily. Within four days there was a disappearance of all visual signs but she still insisted she was very sick and that it was time to go through the clinic again, which she did. There she was told she did not have pellagra and had not had it. Naturally that did my standing with her little good, and she has passed on to other doctors. I did have her under observation long enough to see what nicotinic acid could do in a quite severe fulminating case of pellagra.

In addition to the cases above I treated eight cases of pellagra in negroes from plantations. The only difference in their management was the insistence upon their returning to the office at weekly intervals for observation throughout the summer. If there was any indication of a return of symptoms they were given 25 mgs. of nicotinic acid in 100 cc. of water intravenously.

SUMMARY

1. Nicotinic acid has been proven to be a specific for the skin, mucous membrane and mental symptoms of pellagra.

2. The exact mechanism of the action of the drug is not yet fully understood. There is evidently some endogenous substance contained in the stomach that must be present before the acid can be effective in correcting the disease.

3. The dose is variable. But 500 mgs. orally or 200 mgs. intravenously daily has been found to be adequate.

4. It cannot take the place of an adequate diet. In this connection I would like to take exception to a plan of prevention I have heard mentioned once or twice. It has been said that the disease might be prevented by issuing to charity cases and people of very low income a supply of nicotinic acid to be taken regularly. To me this appears absurd, because pellagra is not due to the deficiency of nicotinic acid alone. If the disease is to be prevented it is going to have to come from the education of the public to the fact that it only appears where there is a prolonged dietary deficiency. After the development of the disease the drug is strongly indicated and will bring about a cure much more quickly than any form of treatment formerly used although it can hardly be called the ideal method of prevention.

5. To remain free from symptoms after an apparent cure the diet must be watched and an adequate intake assured.

6. Pellagra is a disease of what we do not eat. Until the public is educated to this fact we will have to continue to treat it.

REPORT OF REFERENCE COMMITTEE OF THE A. M. A. HOUSE OF DELEGATES ON CONSIDERATION OF THE WAGNER NATIONAL HEALTH BILL

Your reference committee has carefully considered the bill designated as S. 1620, "A Bill to provide for the general welfare by enabling the several states to make more adequate provision for public health, prevention and control of disease, maternal and child health services, construction and maintenance of needed hospitals and health centers, care of the sick, disability insurance and training of personnel; to amend the Social Security Act; and for other purposes."

History of Wagner Health Bill

This bill was introduced by Senator Robert F. Wagner of New York, Feb. 28, 1939, and is commonly referred to as the Wagner Health Bill. The bill itself provides that, if it is enacted, it may be cited as the "National Health Act of 1939." The purposes of the bill are sufficiently stated in the title, but the bill itself must be recognized as a proposed amendment to the Social Security Act of 1935. The bill is intended to make effective a national health program recommended by the Interdepartmental Committee to Coordinate Health and Welfare activities.

The House of Delegates of the American Medical Association, at its special session in Chicago, Sept. 16 and 17, 1938, adopted five recommendations made by a special committee that had been appointed to consider and report on the National Health Program. It is important that this fact be borne in mind, for the bill now under consideration, which was drafted long after those recommendations were adopted and at a time when they were presumably known to the proponents of this bill, does not recognize either the spirit or the text of those recommendations. Any criticism of this bill by the Association is not to be construed, therefore, as a repudiation of any of the principles adopted at the 1938 special session of the House of Delegates.

Analysis of the Bill

S. 1620 proposes to amend title V of the Social Security Act—Grants to States for Maternal and Child Welfare—and title VI—Public Health Work and Investigations—and proposes to add to the Social Security Act certain new titles: namely, title XII—Grants to States for Hospital

and Health Centers; title XIII—Grants to States for Medical Care, and title XIV—Grants to States for Temporary Disability Compensation.

Already some individuals and organized groups in the United States have appeared before the Senate subcommittee which has this bill under consideration and have urged its immediate enactment. Although the stated objectives of the Wagner Health Bill are generally recognized as desirable, your committee cannot approve the methods by which these objectives are to be attained.

Repeatedly, physicians and all other qualified professional groups have recommended the coordination and consolidation of the health activities of the federal government. The Wagner Health Bill leaves existing and proposed preventive and curative medical services widely scattered through several federal agencies.

This bill does not in any way safeguard the continued existence of the private practitioners who have always brought to the people the benefits of scientific research and treatment.

It does not provide for the use of the thousands of vacant beds now available in hundreds of church and community general hospitals.

The Wagner Health Bill proposes an extensive program in the field of "health, diagnostic and treatment centers, institutions and related facilities," without defining their functions.

This bill proposes to make federal aid for medical care the rule rather than the exception, since it does not specifically limit its benefits to persons unable to pay for adequate medical care.

The Wagner Health Bill does not recognize the need for suitable food, sanitary housing and the improvement of other environmental conditions necessary to the continuous prevention of disease and promotion of health.

This bill insidiously promotes the development of a complete system of tax supported governmental medical care, thus undermining and debasing present standards of medical services.

The House of Delegates in September, 1938, urged compensation for the loss of wages during sickness. The Wagner Health Bill deviates from this suggestion by proposing to provide medical services in addition to compensation.

The Wagner Health Bill would authorize an enormous expansion of governmental medical services and therewith ultimately unlimited appropriations for its health program. The funds necessary would be so great as to increase still further the present burdensome general taxation.

The Wagner Health Bill provides for supreme federal control. Rules and regulations must be promulgated by the Chief of the Children's Bureau in the Department of Labor, the Surgeon General of the Public Health Service, the Federal Emergency Administrator of Public Works, and the Social Security Board. These federal agents are given authority to disapprove plans proposed by the individual states.

The House of Delegates at its September, 1938, session approved the expansion of preventive and other medical services when the need could be shown. The Wagner Health Bill prescribes no method for determining the nature and extent of the needs for which it proposes allotments of funds.

The provisions in the Wagner Health Bill that have never been considered by the House of Delegates are the authorization of appropriations for studies, investigations and demonstrations, and the creation of federal and state advisory councils.

Conclusions

The Wagner Health Bill, as judged by the considerations that have been here presented, is inconsistent with the fundamental principles of medical care established by years of scientific professional medical experience, and in the opinion of your committee it is therefore contrary to the best interests of the American people.

For years the health of the people of the United States, as measured by sickness and death rates, has been better than that of most foreign countries, and this improvement has been continuous. The fortunate health conditions in the United States cannot be dissociated from the standards and methods of medical practice that have prevailed under the present system of medical practice.

No other profession and no other organization have done more for the prevention of disease, the promotion of health and the care of the sick than have the medical profession and the American Medical Association. No other groups have shown more genuine sympathetic interest in human welfare.

The contribution of the individual members of the American Medical Association to medical care is universally regarded as monumental in total volume. The contribution of the American Medical Association, through a program of medical education and the activities of its numerous councils which safeguard medical service, gives

abundant proof of interest in the problems of the national health. It has given continued consideration to these problems, whereas others show concern with these proposals because of a present but, it is to be hoped, a temporary need for relief. These are the groups which request revolutionary legislative action as indispensable for the extension and further diffusion of health facilities.

In view of its record and in consideration of the responsibility which American social history and the nature of medical care have imposed on the medical profession, the American Medical Association would fail in its public trust if it neglected to express itself unmistakably and emphatically regarding any threat to the nation's health and well-being.

The American Medical Association must therefore, speaking with professional competence, oppose the Wagner Health Bill.

Recommendations

Nevertheless, recognizing the soundness of the principles stated in the recommendations adopted by the House of Delegates at its special session in 1938, namely the expansion of preventive medicine and public health where need can be shown, the extension of medical care for the indigent and the medically indigent where the need can be demonstrated, with local determination of needs and local control of measures to supply these needs, your committee would urge the development of a mechanism for meeting these needs within the philosophy of the American form of government and without damage to the quality of medical services.

This question, as it relates to the aid to be given by an individual state to its own counties, municipalities or other local political units, is not immediately before this Association. The answer is to be found in the individual state constitutions and state statutes. Counties, townships and municipalities are creatures of the individual states and can be molded and guided by the state for its own purposes. The individual state, itself, is not a creature of the federal government. The federal government is, as a matter of fact, a creature of the individual states.

The fundamental question is how and when a state should be given financial aid by the federal government out of the resources of the states as a whole, pooled in the federal treasury. Disasters such as floods, dust storms, fire and epidemics have long been recognized as justify-

ing such federal aid. No state or person has ever been heard to object to the use of funds out of the federal treasury for such purposes. No one has ever proposed however that, because federal aid is extended under such conditions to a state in distress, a corresponding aid must be extended to every other state regardless of its need. Nor has any one ever been heard to say that federal aid to a state in distress, because of flood, dust storm, fire or epidemic, shall not be extended unless and until the suffering state has produced from its own treasury a stated amount of money to aid in affording the relief. The development of such bizarre thinking may be traced to those who have originated within comparatively recent years the granting of federal subsidies—sometimes referred to as "grants in aid"—to induce states to carry on intrastate activities suggested frequently in the first instance by officers and employees of the federal government. The use of federal subsidies to accomplish such federally determined activities has invariably involved federal control. Any state in actual need of financial aid from the federal government for the prevention of disease, the promotion of health and the care of the sick should be able to obtain aid in a medical emergency without stimulating every other state to seek and to accept similar aid and thus to have imposed on it the burden of federal control.

The mechanism by which this end is to be accomplished, whether through a federal agency to which any state in need of federal financial assistance can apply or through a new agency created for this purpose or through responsible officers of existing federal agencies, must be developed by the Executive and the Congress, who are charged with these duties. Such method would afford to every state an agency to which it might apply for federal assistance to enable it to care for its own people without involving every other state in the Union or the entire government in the transaction and without disturbing permanently the American concept of democratic government.

Summary

1. The Wagner Health Bill does not recognize either the spirit or the text of the resolutions adopted by the House of Delegates of the American Medical Association in September, 1938.

2. The House of Delegates cannot approve the methods by which the objectives of the National Health Program are to be obtained.

3. The Wagner Health Bill does not safeguard in any way the continued existence of the private practitioners who have always brought to the people the benefits of scientific research and treatment.

4. The Wagner Health Bill does not provide for the use of the thousands of vacant beds now available in hundreds of church and community general hospitals.

5. This bill proposes to make federal aid for medical care the rule rather than the exception.

6. The Wagner Health Bill does not recognize the need for suitable food, sanitary housing and the improvement of other environmental conditions necessary to the continuous prevention of disease.

7. The Wagner Health Bill insidiously promotes the development of a complete system of tax supported governmental medical care.

8. While the Wagner Health Bill provides compensation for loss of wages during illness, it also proposes to provide complete medical service in addition to such compensation.

9. The Wagner Health Bill provides for supreme federal control; federal agents are given authority to disapprove plans proposed by the individual states.

10. The Wagner Health Bill prescribes no method for determining the nature and extent of the needs for preventive and other medical services for which it proposes allotments of funds.

11. The Wagner Health Bill is inconsistent with the fundamental principles of medical care established by scientific medical experience and is therefore contrary to the best interests of the American people.

12. The fortunate health conditions which prevail in the United States cannot be dissociated from the prevailing standards and methods of medical practice.

13. No other profession and no other group have done more for the improvement of public health, the prevention of disease and the care of the sick than have the medical profession and the American Medical Association.

14. The American Medical Association would fail in its public trust if it neglected to express

itself unmistakably and emphatically regarding any threat to the national health and well being. It must therefore, speaking with professional competence, oppose the Wagner Health Bill.

15. The House of Delegates would urge the development of a mechanism for meeting the needs for expansion of preventive medical services, extension of medical care for the indigent and the medically indigent, with local determination of needs and local control of administration, within the philosophy of the American form of government and without damage to the quality of medical service.

16. The fundamental question is how and when a state should be given financial aid by the federal government out of the resources of the states as a whole, pooled in the federal treasury.

17. The bizarre thinking which evolved the system of federal subsidies—sometimes called "grants-in-aid"—is used to induce states to carry on activities suggested frequently in the first instance by officers and employees of the federal government.

18. The use of federal subsidies to accomplish such federally determined activities has invariably involved federal control.

19. Any state in actual need for the prevention of disease, the promotion of health and the care of the sick should be able to obtain such aid in a medical emergency without stimulating every other state to seek and to accept similar aid, and thus to have imposed on it the burden of federal control.

20. The mechanism by which this end is to be accomplished, whether through a federal agency to which any state in need of federal financial assistance can apply, or through a new agency created for this purpose or through responsible officers of existing federal agencies, must be developed by the Executive and the Congress, who are charged with these duties.

21. Such a method would afford to every state an agency to which it might apply for federal assistance without involving every other state in the Union or the entire government in the transaction.

22. Such a method would not disturb permanently the American concept of democratic government.

CORRESPONDENCE

Monticello, Ark.,
June 14, 1939.

Dear Doctor:

I feel that I have a case in our hospital this morning which should be called to the attention of the doctors of the state. It will raise the old discussion of: "Should Doctors Dispense their Drugs?"

In January of this year, a woman of 50, was operated in this hospital for a ruptured appendix and peritonitis. She had a stormy course but recovered and went to her home about 50 miles away.

On April 1st, she was brought back with a septic condition, apparently centered around the region of liver, and a metastatic subdiaphragmatic infection with possible abscess formation was feared. She was treated here with blood transfusion, and given sulfanilamide in large doses. She went home after a week with a prescription was given her for 60 five grain sulfanilamide tablets to be taken 3 times day, the prescriber knowing the medicine could only last 5 days.

Today she is back, with history of having had malaria during past two weeks, and that she had taken various kinds of purgative drugs, quinine chill tonic, and everything else her neighbors in a farm community could suggest. In addition to all this, she has persistently taken 20 grains of sulfanilamide 3 times a day with all this other medicine. The druggist who filled the original prescription had refilled it 4 times for this dangerous drug and had not told the people it was dangerous, and that it should not be taken with other medicines. Today she is clearly poisoned by sulfanilamide.

Now, when doctors write prescriptions, and know they will be used as household remedies ever after, and especially such powerful and dangerous drugs as sulfanilamide, is it not time to call the attention of our druggists to their part in this dual responsibility of doctor and druggist? Or, would it not be better in such cases if the doctors dispensed their own drugs? This case is so gross a case of misplaced confidence by the druggist, that I feel the doctors of the state should know it, and am asking you to publish this letter in the Journal and call the attention of the druggists of the state to it.

Yours truly,

J. S. Wilson.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

AN Advisory Committee on Tuberculosis of the Medical Society of New Jersey has drafted a statement of principles and standards regarding tuberculosis case-finding among pupils in public schools. This carefully drafted statement, representing the views of one organized body of physicians, should be helpful to all physicians as the practice of case-finding in schools is growing in popularity. Space prohibits reprinting the report in full—some passages have been abbreviated, others omitted.

CASE-FINDING IN PUBLIC SCHOOLS

1. QUESTION—How valid is the tuberculin test? May we assure parents that the positive or the negative reaction is absolutely correct?

ANSWER—The tuberculin test is one of the most reliable tests that we have for determining whether or not tubercle bacilli have at some time entered the body. If positive, it does not necessarily indicate the presence of tuberculosis, the degree of infection, nor the extent of damage done, if any.

For all practical purposes, exceptions to this statement may be ignored. They should not cause worry to parents.

2. QUESTION—Which grades should be tested?

ANSWER—The ideal plan would be to test children of all grades and ages.

First Grade Pupils—In this group one is likely to find so small a number of infections as hardly to make the effort worth while on a very large scale. On the other hand, experience has shown that very young children with positive tuberculin reactions will serve as leads to a large number of open cases of tuberculosis that were active sources of infection.

Kindergarten—The same may be said of this group.

High School—The high school age is receiving special attention for several reasons. First, because of the high morbidity and mortality rate known to exist between the ages of 15 and 25. Secondly, because in the average high school a large percentage of this important age group is available under ideally-controlled conditions. More cases of tuberculous infections are likely to be found in this age than in the lower grades.

3. QUESTION—When is re-testing advisable?

ANSWER—All tuberculin-negative students should be re-tested at least once a year. All tuberculin-positive students should be re-X-rayed at least once a year, unless something abnormal is found, when the frequency of re-X-raying will depend upon the particular circumstances in each case.

4. QUESTION—Is the Mantoux test so definitely superior to other tests that the question of choice may be ignored?

ANSWER—The Mantoux test is definitely superior to other tests because:

1. It is twice as sensitive as the scratch test of Von Pirquet.
2. It is an exact quantitative test.
3. The response when positive is more definite, and more prompt than in all other tests.

However, as a second choice, especially in the face of objection to the "needle," the Patch test may be used. The following are the objections to the Patch test:

1. It must be kept dry.
2. It must not be interfered with by the child.
3. Frequently when examined at the end of 48 hours, it may be negative, and require four days for a reading.
4. Under the best of circumstances it is at least five per cent less reliable than the Mantoux test.
5. The greater cost of each test would also become a financial problem if planned for a large number.

5. QUESTION—What is the significance of different degrees of reaction?

ANSWER—Different degrees of reaction have no significance beyond the fact that they indi-

cate different degrees of **sensitivity**. This has no bearing upon the question of the **amount** of infection or disease, and need not concern school administrators or even school physicians. It is better not to confuse the minds of parents with any attempts to interpret degrees of reaction.

6. QUESTION—Should all positive reactors be X-rayed? Are there indications to warrant X-raying of negative reactors?

ANSWER—All positive reactors should, without exception, be X-rayed.

With reference to negative reactors, an X-ray is not necessary to exclude tuberculosis; but it is frequently advisable for certain special reasons, such as malnutrition, suspicion of heart disease, chest deformity, or recent non-tuberculous lung infections such as pneumonia, or the presence of symptoms of chronic bronchitis or pulmonary disease of non-tuberculous character.

7. QUESTION on the accuracy of the paper X-ray film, is answered by defining the limitations of paper film, appraising its advantages and stating that paper films are quite satisfactory in the "sifting" process or screening out of abnormalities.

8. QUESTION—Is the celluloid film infallible?

ANSWER—No. There are lesions in the lung so small and so translucent to the ray that they may not be demonstrable in **any** films.

9. QUESTION—Assuming a positive reaction to the Mantoux, and a negative reading of a paper film, what should be told parents?

ANSWER—A positive Mantoux reaction, by itself, does not indicate that a person has tuberculosis. "If the tuberculin test is positive (red and swollen), it means only that tuberculosis germs have at some time entered the body. It does not tell how many there are, or if any damage has been done. It should not cause worry to parents.

"If the test is positive, the child's chest should be X-rayed to be certain that no harm is being done in the lungs. An X-ray examination should also be made of every member of the household to learn if the child is being exposed to an open case of tuberculosis. Frequently this may reveal other cases of tuberculosis before the victim is at all aware of the disease. If no one in the family has the disease, search should be made among the child's playmates or others with whom he comes in close contact. It is perfectly safe for a child with a positive reaction to mingle with other children,—for unless there are tu-

bercle bacilli in his sputum, he cannot pass them to others. Tuberculosis often exists in a concealed form in unsuspecting persons, and it is important to make the discovery in order to prevent further spread of the disease."

The parents should also be advised that the tuberculin-positive student should be X-rayed regularly at least once a year so as to detect any evidence of reinfection as early as possible. If the tuberculin test is negative, no X-rays are necessary until a subsequent tuberculin test proves to be positive.

10. QUESTION—Will you outline briefly the follow-up procedure for the average school district?

ANSWER—After a tuberculosis survey, the parents are advised in a general way as to the results, and instructed to see their family physician for further explanation of the same.

Parents receiving reports to the effect that the Mantoux test was negative are advised of the importance of having the children re-tested annually by their own doctor, as long as they are negative.

In the case of the child who had a **positive** Mantoux with a **negative** X-ray, the parents are advised to have the child X-rayed at least once a year thereafter through their own physician. They are also advised to have all other members of the household X-rayed, and all children under fifteen Mantoux tested.

In the case of those children in whom the X-ray showed some abnormality, the parents are particularly urged to take the report of the findings to their family physician at once. He is to be further informed of the desirability of communicating personally with those conducting the survey, who should endeavor to cooperate with him to the fullest extent on behalf of his patient. For those who cannot afford private service, the facilities of the tuberculosis clinics should be made available.

With reference to the schools, plans are formulated for continuing these surveys so as to test all new admissions each Spring, as well as those previously tuberculin-negative.

It is advised that no child should be excluded from school until the X-ray reveals findings that would warrant it and no type of active case, communicable or not, should remain in school—all active cases require treatment.

Tuberculosis Case-Finding in Public Schools, A. E. Jaffin, M. D., The Journal of the Medical Society of N. J., Vol. XXXVI, No. 2, Feb. 1939.

What Every Citizen of Arkansas Should Know • Do You Want Copies of This for Your Office Reception Room? . . .

Waste, Inefficiency and Dictatorship in Public Health!

Under Wagner Bill, Now Before U. S. Senate, Your Money Would Be Spent by Federal Bureaus For Over-Expansion and Would Abolish Local Control of Health

MR. or Mrs. Citizen—you should voice your objections to Senate Bill 1620, known as the Wagner National Health Bill, to Senators Caraway and Miller and Arkansas' Representatives in Congress. Why? The answer is obvious.

You should object to any proposal which (1) provides for the expenditure of the taxpayers' money (your money) for unnecessary things; (2) deprives individuals and local communities of their rights by placing dictatorial power in the hands of appointive Federal officials; (3) pretends to provide efficient services when such would be impossible under the administrative system established; (4) places control over the intimate, confidential relationship between you and your doctor in the hands of politicians.

* * * *

HERE are a number of specific serious objections to this proposal:

FIRST—It would authorize the expenditure of approximately \$100,000,000 of the taxpayers' money in 1940; at least twice that amount in 1941; probably three times that amount in 1942; and, thereafter, an unlimited amount—perhaps as much as a billion dollars a year, as estimated by proponents of the proposal. You would have to pay additional taxes to create these funds. Then, too, you must remember that only a fraction of the taxes so collected by the Federal Government would be returned to Arkansas. Much would be used up in the collection and administration of these funds and, what is more to the point, much of your tax money would be allocated to distant states.

SECOND—It would authorize the expenditure of Federal money (your money), supplemented by state funds (your money) for the building of hospitals and medical centers and for facilities and services without any particular regard as to the need for such buildings, facilities and services. In fact, the need for an expansive program like that proposed by Senate Bill 1620 has not been shown—cannot be shown.

THIRD—It would make several Federal bureaus virtually dictators over the health and medical activities of Arkansas and the rest of the nation. Such centralization of power in Washington would be unwarranted and dangerous. There is too much centralization now. Your local health department and the physicians of your community would be servants of Washington bureaus, managed by political appointees. The character of public health services and the care of the sick, available for you, would be determined in Washington. The quality of both these services to you certainly would be made much poorer than they are today.

FOURTH—It would attempt to coerce Arkansas into unwarranted and needless expansion of public health and medical services in this state by holding out Federal funds as bait. Senate Bill 1620 would provide cash incentives to states who are willing to yield to Federal dictation and penalties to those who refuse to do so.

FIFTH—It would, indirectly, encourage the establishing of state systems of compulsory health insurance with their apparent, and inherent, evils of poor medical care, inefficient administration, political manipulation, and waste of money.

These are not all—just some—of the serious objections which can be raised to U. S. Senate Bill 1620.

THE physicians of Arkansas want all the people to have the advantages and protection of efficient public health services and good medical care. They constantly are fighting for adequate public health safeguards, expansion of public health services (when and where needed), and a better distribution of good medical services so that all citizens (rich or poor) may benefit. These ends are being accomplished and can be accomplished without the enactment of U. S. Senate Bill 1620.

Arkansas has the brains and resources necessary to meet the health and medical problems of its citizenry. It does not have to mortgage itself to the Federal Government to maintain adequate health protection and good medical care for all its people.

The verdict, Mr. or Mrs. Citizen, rests on your opinion and action.

Copies of the above article will be mailed to those who requested copies of the article, "Do You Want Your Own Doctor—Or the 'State' Doctor," published several months ago. Members who would like copies of this second article and **who did not order copies of the first article**, will be supplied with them if they will **file a request with the State Secretary**.

THE JOURNAL

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W. R. BROOKSHER, M. D., Editor
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EDITORIALS

THE SAINT LOUIS SESSION OF THE
AMERICAN MEDICAL ASSOCIATION

With a registration of 7408 Fellows, the American Medical Association convened in Saint Louis, May 15th-19th. The most important business transacted by the House of Delegates was the consideration of the Wagner Bill, the so-called National Health Act. Without dissenting vote, the House registered its objections to this legislation in 22 statements, although it did recognize that some of the objectives of the bill were desirable. It seems pertinent that the House found 22 objections to the bill; no single approval. A committee was appointed to represent organized medicine at hearings now being conducted on the bill in Congress. Irvin Abell, in the presidential address, stated that the principal point in the indictment of the American Medical Association was determina-

tion of where the power of policing professional organizations lay, stating that heretofore it had been left to the organizations to establish standards of qualifications, training, attainment, character and conduct of members of their ranks. Rock Sleyster, incoming president, called attention to the gain of over 14,000 members by the Association in the past five years as unanswerable argument to those who claim that there is a split in organized medicine. The House adopted a resolution that directors of clinical laboratories be graduates of medical schools, licensed physicians, who have had three years work in clinical pathology. The Council on Medical Education and Hospitals was increased from seven to nine members. Congress was again petitioned to provide funds for the erection of a building for the Army Medical Library and Museum. A study of preliminary reports in the survey on medical need and care indicated that about ten per cent of the persons in the United States are now receiving free medical care from physicians. Nathan B. Van Etten, New York, was elected President-Elect; Alphonse McMahon, Saint Louis, Vice-President, Olin West, Secretary, and Atlantic City was selected as the meeting place in 1942.

MALPRACTICE INSURANCE

A check of the physicians who carry the group malpractice insurance protection afforded members of the Society reveals an alarming indifference on the part of the membership to the need for such protection. Less than 25% of the membership carries a policy with our group carrier, The Aetna Casualty & Surety Company. The others are either indifferent to the practical necessity of possessing this protection or have not had their attention directed to its availability. The Journal takes this method of urging all members to provide themselves with a malpractice policy and will be glad to assist individual members to secure one. Records show that malpractice claims are increasing in number over the country; in some sections extremely high levels have been reached in the filing of suits against physicians for alleged malpractice. Sound business judgment dictates that every physician protect his interests by reliable insurance.

EDITORIAL COMMENT

The Johnson County Medical Society has inaugurated an aggressive publicity campaign in the county papers, using the prepared weekly advertisements on organized medicine and medical topics which have been favorably commented upon in other sections. These will appear weekly throughout the coming year and will deal with diverse topics. The first advertisement which appeared June 8th, is titled: "Is

Your Doctor a M. D.?" and stresses the importance of the public distinguishing between the Doctor of Medicine and the innumerable faddists and cultists who have preempted the title of Doctor. This is a most constructive step by an alert county medical society; one certain to react well to the interests and ideals of the organized medical profession in Johnson County. Other county medical societies are urged to investigate this publicity as first presented in Arkansas by the Johnson County Medical Society.

OBITUARY

ALVIN L. JOBE, age 57 years, died in Little Rock May 26th. A graduate of the University of Arkansas School of Medicine in 1914, he served in the army medical corps from November, 1917, to May, 1919. Subsequently he had practiced in Little Rock. In addition to his membership in the Pulaski County Medical Society and the Arkansas Medical Society, he was a member of the Fulton Masonic lodge, the Arkansas Consistory, Bendemeer Grotto and the Capitol View Methodist church. Surviving relatives are his wife and two daughters.

WILLIAM VINCENT LAWS, aged 73, Hot Springs National Park, died June 8th. Born May 18, 1886, in Shelbyville, Indiana, he graduated from the Kentucky School of Medicine in 1893, later attending the Medico-Chirurgical College of Philadelphia from which he graduated in 1900. During his course of study at this latter institution, he practiced medicine in Philadelphia and served as an assistant professor to the Women's Medical College. He became associated with the Ozark Sanitarium and Bathhouse at Hot Springs National Park in 1903, obtaining full control of the sanitarium in 1910. In addition to his membership in the Garland County Medical Society and the Arkansas Medical Society, to which he was elected to honorary membership at the 64th annual session, he was a fellow of the American Medical Association, a

charter fellow of the American College of Surgeons, a member of the American Urological Association, the Elks Lodge, the Chamber of Commerce, the Knights of Columbus and an active leader in St. Mary's Church. Miss Josephine Pottinger, to whom he was married in 1907, died in 1932.

OSCAR JACOB MacLAUGHLIN, aged 41, died in Hot Springs National Park June 2nd of injuries received in an automobile accident. Born in Niagara Falls, New York, in 1897, he first studied medicine at the University of Virginia, but later entered the University of Arkansas School of Medicine from which he graduated in 1927. He began practice in Hot Springs National Park in 1928 and in recent years had confined himself to the speciality of eye, ear, nose and throat. For a number of years he was associated with the Wade Clinic but had more recently opened his own offices. For more than 10 years he had served as a Captain in the Medical Detachment, 153rd Infantry, Arkansas National Guard. In addition to his membership in the Garland County Medical Society, the Arkansas Medical Society and the American Medical Association, he was a member and past-president of the Civitan Club, a member and past-president of the Ouachita Area Council, Boy Scouts of America, a member of the Phi Rho Sigma fraternity, a member and past-president of the Hot Springs Rifle and Pistol Club and a member of the various Masonic bodies. Surviving relatives are his wife and a son.

PROCEEDINGS OF SOCIETIES

The First Councilor District Medical Society met at Tyronza May 24th for the following program: Address of welcome, Hon. J. G. Was-kom; Response, Ira Ellis, Monette; "Indications and Dosage of Sulfanilamide," M. L. Cantrell, Marked Tree; "Varied Uses of Sulfanilamide and Their Evaluation," W. C. Overstreet, Jonesboro; "Reminiscences in Medicine for the Past Fifty Years," B. F. Turner, Memphis; "The Pathological, Clinical and Preventive Aspects of Entameba Histolytica Infection," W. Mc. Lamb, Paragould, and "The Non-Surgical Treatment of Sinus Infections," O. T. Cohen, Jonesboro. J. M. McCurry, Cash, was re-elected secretary-treasurer and Paragould was chosen for the fall meeting place.

The Alumni Association of the University of Arkansas School of Medicine met in dinner session at Little Rock June 5th honoring Frank Vinsonhaler, retiring dean. Dewell Gann, Jr., presented Dr. Vinsonhaler with a gift from the alumni. The following were elected officers of the Association: President, M. J. Kilbury; Vice-president, Fount Richardson, and Secretary-Treasurer, T. Duel Brown. In the future the Association will hold its annual banquet and election of officers on the first night of the Arkansas Medical Society meeting.

The Jefferson County Medical Society met at Pine Bluff June 9th for the following program: "Etiology and Significance of Hematuria," H. Fay H. Jones, Little Rock; "Removal of Foreign Bodies from Stomach and Respiratory Tract," John Smith, Little Rock, and "Skin Cancer Prophylaxis and Treatment," Fred Hames, Pine Bluff.

The Benton County Medical Society met in dinner session at Siloam Springs June 8th for the following program: "Deficiency Diseases," Chas. T. Chamberlain; "Summer Diarrheas," Ralph Weddington, and "The Treatment of Bronchiectasis," W. O. Arnold, all speakers of Fort Smith.

Geo. M. Love, Secretary.

The Ninth Councilor District Medical Society met at Harrison June 6th for the following program: "Medical Progress," A. S. Buchanan, Prescott; "Sulfanilamide and Sulfapyridine in

Pediatrics," U. J. Busick, Springfield, Missouri; "Diabetic Emergencies," G. D. Callaway, Springfield, Missouri; "Diagnosis and Treatment of Foreign Bodies in the Food and Air Passages," P. L. Mahoney, Little Rock, and "Injuries of the Ankle Joint," Jos. F. Shuffield, Little Rock. The evening banquet session was addressed by Mr. J. L. Shouse, Harrison, and A. S. Buchanan. The following officers were elected: President, Loyd Jackson; Vice-president, H. V. Kirby, and Secretary-Treasurer, J. G. Gladden.

The Sebastian County Medical Society was addressed June 13th by H. Fay H. Jones, Little Rock, "Hematuria with Special Reference to Bladder Tumors," and "Pin Fixation in Long Bone Fractures," F. W. Carruthers, Little Rock.

Ralph E. Weddington, Secretary.

The final session in the Mississippi County Medical Society postgraduate study course was held in Osceola as a banquet session June 6th, L. D. Massey presiding as toastmaster. Scientific papers were read by: W. Likely Simpson, "Sinusitis," C. D. Blassingame, "Infections of the Mouth, Pharynx, Larynx and Neck," and O. W. Hyman, "Postgraduate Study," all speakers of Memphis.

The Pulaski County Medical Society was addressed June 5th by H. W. Hundling, "Diverticulosis and Diverticulitis of the Bowel."

E. H. White, Secretary.

S. A. Thompson entertained the Ouachita County Medical Society at a banquet in Camden June 16th celebrating the fact that three generations of Thompsons are now practicing medicine: J. S. Thompson, Stephens; S. A. Thompson, Camden, and S. A. Thompson, interne at Fairfield, Alabama. Speakers were A. S. Buchanan, Prescott, J. S. Rinehart, Camden, and W. R. Brooksher, Fort Smith.

R. B. Robins, Secretary.

The Union County Medical Society met June 6th for the following program: "A Review of the Treatment of Acute Head Injuries," R. B. Robins, Camden, and "The Surgical Treatment of Pulmonary Tuberculosis," Harvey Shipp, Little Rock.

J. B. Wharton, Jr., Secretary.

PERSONALS AND NEWS ITEMS

H. Fay H. Jones, Little Rock, attended the American Urological Association at White Sulphur Springs, Virginia, during May.

The Tulane Alumni Association of Arkansas has elected the following officers: President, H. H. Smith, Fort Smith; Vice-president, A. W. Strauss, Little Rock, and Secretary, G. A. Herbert, Hot Springs National Park.

"Some Medical Aspects of Chronic Gallbladder Disease" by O. C. Melson, Little Rock, appeared in the June Southern Medical Journal.

C. H. Dickerson and Lyle L. Hassell have opened the Doctors Clinic at Conway.

R. H. Whitehead, Jr., has become an associate of J. B. Jameson at Camden.

MARRIED—On June 1st, Friedman Sisco, Springdale, and Miss Helen Vierhiller, San Antonio.

Dr. and Mrs. J. B. Askew, Batesville, spent a June vacation in California.

Dr. and Mrs. T. P. Foltz, Fort Smith, spent a June vacation in Hot Springs and Memphis.

W. C. Porter, Ozark, visited Washington, New York, Canada and other points in a June vacation.

H. G. Heller and B. H. Hawkins have been elected surgeon and child welfare officer, respectively, of the Mena post of the American Legion.

R. T. Rowland, John Stathakis, Elizabeth Fletcher and N. T. Hollis, Little Rock, attended the meeting of the American Psychiatric Association in Chicago during May.

R. J. Haley, Jr., Paragould, J. C. Graves, Lockesburg, and Robert Hood, Russellville, have been appointed to The State Medical Board of the Arkansas Medical Society.

Fred Krock, Fort Smith, spent a May vacation in Silver Springs, Florida.

H. A. Higgins, Little Rock, has been promoted to commander in the naval reserve medical corps.

A. A. Blair has been elected vice-president of the Noon Civics Club at Fort Smith.

S. A. Thompson has been elected president of the Camden Lions Club.

Stanley M. Gates has been elected president of the Monticello Rotary Club.

"A Study of the Use of Silk, Catgut, and the Noble Plication with Reference to Abdominal Adhesions" by J. K. Donaldson and R. R. Cameron, Little Rock, appeared in Surgery, April, 1939.

E. W. Pillstrom has moved from Altus to Ozark.

Jerome S. Levy, Little Rock, attended the National Gastroenterological Association meeting in New York during June and discussed the paper of James J. Hepburn on "The Surgical Management of Peptic Ulcer."

Fount Richardson, Fayetteville, has been promoted to Captain, Medical Corps, Arkansas National Guard.

M. B. Bowman, Hot Springs National Park, has been appointed 1st Lieutenant, Medical Corps, Arkansas National Guard.

J. M. Stewart has been elected surgeon of the Van Buren post of the American Legion.

PHYSICIAN WANTED—To take over the practice of the late Dr. G. H. Buffington at Decatur, Arkansas. Write—Mrs. G. H. Buffington, Decatur, Arkansas.

RANDOM THOUGHTS OF THE SECRETARY

May 23rd. This evening busy sorting match book covers, the youngster's collecting hobby, the collection being increased well over 100 by our recent stay in Saint Louis. A most inexpensive hobby when compared with stamp collecting and the like and one with unlimited possibilities in these days when every filling station puts out its own matches as an advertisement.

May 26th. "Rowdy" Raymond Smith brings Rodeo color to the civic club and by his rendition of "Empty Saddles" brings more applause than we have heard from this group in many a day.

May 28th. Returning to Devil's Den State Park, where we dine al fresco and perhaps too well. Observing nature in its many forms in this delightful haven, and a proper time elapsing, the youngster strips to shorts and spends the rest of the afternoon in the water, reluctantly taking departure from the beach at 5:40 P. M. Thence, down along familiar 71 to eat with John Burns, this customary activity enlivened by walking to the top of the Mt. Gayler observation tower where a magnificent view awaits in peaceful splendor, the quiet of these moments but slightly disturbed by the car horns about a sixteenth of a mile below.

June 1st. We note in our wanderings about the hospital that Bill Arnold is now charged with breaking a 20 cc. glass syringe. Looks as if he will compile a record unequalled by a probationer.

June 3rd. Comes a long distance prescription for our illness of last month from Stanley Gates, it being common knowledge in the national guard that he can diagnose and treat the soldier in the last tent in the last row without leaving his post in the rear of the regimental infirmary, a peculiar talent which Matthews will never acquire. Also comes the inquiry from Sam Thompson about the attendance of Jones at the annual banquet session, to which we pass along the news that Jones came home with neuritis in his throwing arm. Once again, this being the fourteenth year that has happily rolled around, we voice appreciation to the better half for the joys of these years together.

June 5th. Taken telegraphically to task by Bob Robins for our wise crack on his headline speaker for the Fifth District meeting this coming October, we publicly acknowledge our ignorance of the Mayo family tree.

June 6th. Taking off the late afternoon, the family motors to Harrison on an ideal summer day, arriving in ample time for one of the Ninth District's good banquet sessions, the youngster an interested party to the entire affair, evidencing naivete by applause as we and Peggy say our say. President Al speaks of his desire of Heaven as a place where he will have no speeches to make, yet we have never seen him more at ease than in his talk this night. For some reason a goodly number absent on this occasion, missing John, E. M. Gray, Moore, Weast, McCurry and Watkins, always present in the past. In good spirits, the occasion having been enjoyed to the utmost, we head west and south at 10:50, stopping at the Horse Shoe Grill in Rogers for good coffee, traveling the miles in mellow moonlight and to bed at 2:00 A. M. Finally speculating over the vocalist's selection of "Smoke Gets Into Your Eyes"—a never, never happening at a meeting of the Ninth District.

June 13th. The eminent urolog, Fay Jones, and the eminent orthopod, Walter Carruthers, come to town and

give their best scientific presentations to the county society, the while differing widely in their interpretation of the etiquette of addressing a medical society. For our helpfulness in running the lantern this hot night, we are accused of swiping slides, rather than thanked, but such seems to be our lot. The best Goldman steaks ever and the great like which we have for these two city doctors just topped off a happy sort of an evening.

June 14th. Fred Krock, back from a fishing trip to Florida waters, brings us mangoes, delighting the entire family with an ideal summer dessert, and permitting us to be one up in the perennial discussion of California vs. Florida, although we want it known that we are not referring to Pensacola. In the evening to the ball game where Al Schacht performs well in pantomime and many a doctor gets paged, among them Wolfermann, not even present.

June 16th. This day a detour forces us to visit Forrester, a place we have wanted to see for some time. We hope there will be no ill will because we shall not look again. To the accompaniment of heat, dust, rough roads, and other detours, we count it no mean accomplishment that we reach Camden in five and one-half hours. In the midst of Chidester we catch up with President Al and this will serve notice that it was respect for his office which caused us to take his dust from there to Camden. The occasion tonight honors the Thompsons: father, son, grandson, all engaged in the practice of medicine; an unique celebration with much of inspiration to all present. Complimentary and laudatory remarks attend the presence of the elder Thompson, a practitioner of 56 years, who must derive great contentment and serenity from a knowledge that he has well served suffering humanity for so long a time. Present in the best of health, we are glad to note, is J. P. Clemens, now carrying on practice in two towns; Stephens surely the branch office, if we are still to believe what he said about Mt. Holly two years ago. Taking departure, we greet Margaret Robins, happily recovered. Driving the night, the cool air a refreshing change, alarmed but once when we see a freight train headed across our way with no railroad marker signifying a crossing and greatly relieved when we take to a viaduct over the track. On into Conway where the hotel looks more inviting than usual and to bed at 1:30 A. M. A final thought—365 miles traveled since noon and but three new match book covers for the youngster's collection.

June 17th. Up and away early from Conway, we start the usual day's routine at 9:30 A. M. Comes the special Tomato Festival edition of the Advance Monticellonian from Stanley Gates, a worthy edition, none the less pleasing for the fact that the Society's Health Talk follows the leading editorial. Further perusing J. A. M. A. and noting Stanley's contribution to Tonics and Sedatives.

June 19th. Ever so often our thoughts go back to that hot afternoon of June 6th as we were en route to Harrison about three miles south of Gateway on highway 62 when we gave a ride to that 12-year old youngster plodding along the dusty road, carrying a can of kerosene, the loss of his left leg compensated for by a crude crutch from a scrub oak tree. Gratefully he climbed out at his home and we drove along thinking that it would have been a better deed had we caught up with him farther down the road but we also thought how much better a deed it would be for some organization to see that he is provided with an artificial limb. Is the Rogers Rotary Club listening?

WOMAN'S AUXILIARY

MRS. H. E. MURRY, Publicity Secretary

Dear Auxiliary Members:

As I return from the splendid American Medical Association convention, where almost 1,300 women were registered, I regret that September is so far away that our activities will be few for several months. However, there are plans for organizing one or more auxiliaries in June.

Arkansas was well represented at Saint Louis, and every one came home enthusiastic over plans and ideas for 1939-40.

Mrs. Crawford's report was splendid and was well received.

The National Board made a larger allowance for printing the news letter, that more State Board members might receive it.

Hygeia has increased from 3,386 in 1935 to 17,221 in 1939. As you know, Arkansas had a large increase in subscriptions this year.

Great importance was placed on study of Legislation and on voting. One auxiliary reported 100% registered voters. Arkansas will have a Legislation Chairman this year.

Dr. Sleyster stressed our Student Loan Fund as one of our most important projects.

Public Relations was emphasized as never before, as well as education. Auxiliaries are urged to have more Public Relations meetings, being careful to invite not only good speakers but those who are accurately informed, and those approved by our medical society. All doctors' wives were urged to become some part of the auxiliary.

A large and colorful exhibit room attracted much favorable attention. The National Board voted to purchase racks for the future use of these exhibits, the racks to be stored at A. M. A. headquarters.

The newly appointed chairmen will have their plans outlined by August and these will be sent to all state chairmen as soon as they are available. The state chairmen were urged to follow them ONLY as far as they are applicable to our needs and plans.

My correspondence will necessarily be large, at least I trust that it will, but never too large for me to answer any request that our members may make of me—as far as I am able. Your letters and cards will be answered promptly.

Let all state chairmen, officers and county presidents keep constantly in touch with each other. Let us have a chain of cards and letters all the year!

At the Post-Convention Board Meeting, lists of state officers, committee chairmen and county presidents were handed out, and many were sent to those absent; later more were mailed. If some have failed to receive these much needed lists, please write to me and receive them at once.

Our national membership is about 21,000. May Arkansas do much toward a large increase this year.

Each month you are to have a letter from an officer or committee chairman. READ THE JOURNAL.

(Mrs. C. E.) Bess Kitchens, President.

Mrs. C. E. Kitchens, President of Arkansas State Auxiliary, served on the Election Committee at A. M. A. in St. Louis.

Arkansas delegates and alternates to A. M. A. were: Mrs. J. B. Crawford and Mrs. C. E. Oates, Little Rock; Mrs. Loyce Hathcock, Fayetteville; Mrs. T. J. Porter, Hazen; and others from Arkansas attending were Mrs. L. J. Kosminsky and Mrs. Wm. Hibbitts, Texarkana; Mrs. Strauss; Mrs. H. Fay H. Jones, Mrs. F. Walter Carruthers, Little Rock; Mrs. Curtis Jones, Mrs. Mason G. Lawson, Benton; and Mrs. Virgil Payne, Pine Bluff.

APPOINTMENT OF MEDICAL AUXILIARY CHAIRMEN ANNOUNCED

Places Filled by State President

Mrs. C. E. Kitchens, DeQueen, who took office as president of the Woman's Auxiliary to the Arkansas Medical Society at the convention in Hot Springs, has announced the following chairmen of standing committees, other than those elected, for 1939-40:

Exhibits—Mrs. T. G. Porter, Hazen.

Physical Health Examinations—Mrs. J. H. Hesterly, Prescott.

Finance—Mrs. R. B. Robins, Camden.

Archives—Mrs. D. W. Goldstein, Ft. Smith.

J. T. Crawford Memorial—Mrs. Homer Dickens, DeWitt.

Memorial—Mrs. A. A. Blair, Ft. Smith.

Cancer Control—Mrs. B. A. Rhinehart, Little Rock.

Doctors' Day Observance—Mrs. H. T. Smith, McGehee.

Ilse F. Oates Loan Fund—Mrs. C. E. Oates, Little Rock.

Legislation—Mrs. Wm. Hibbitts, Texarkana.

Constitution-By-Laws—Mrs. W. R. Brooksher, Jr., Ft. Smith.

Appointive District Chairmen:

District one, Mrs. T. S. Hare, Crawfordsville.

District two, Mrs. T. L. Evans, Batesville.

District three, Mrs. W. L. Boswell, Clarendon.

District four, Mrs. C. W. Dixon, Gould.

District five, Mrs. J. B. Jameson, Camden.

District six, Mrs. N. B. Daniel, Texarkana.

District seven, Mrs. W. E. Gray, Hot Springs.

District eight, Mrs. B. A. Bennett, Little Rock.

District nine, Mrs. J. L. Jackson, Harrison.

District ten, Mrs. F. R. Morrow, Fayetteville.

Councillors: (Five Past Presidents) Mrs. William Hibbitts, Texarkana; Mrs. M. T. Smith, Conway; Mrs. J. T. McLain, Gurdon; Mrs. C. W. Jones, Benton; and Mrs. J. B. Crawford, Little Rock.

Councilwoman to Southern Medical Society Auxiliary: Mrs. W. T. Wootton, Hot Springs.

Officers installed at Hot Springs convention were:

President—Mrs. C. E. Kitchens, DeQueen.

President-Elect—Mrs. Alfred Hathcock, Fayetteville.

Secretary—Mrs. Pierre Redman, Mena.

First Vice President—Mrs. Loyce Hathcock, Fayetteville, Organization.

Second Vice President—Mrs. Chas. Lutterloh, Hot Springs, Program.

Third Vice President—Mrs. E. D. McKnight, Brinkley, Hygeia.

Fourth Vice President—Mrs. C. A. Churchill, Batesville, Public Relations.

Parliamentarian—Mrs. H. King Wade, Hot Springs.
 Treasurer—Mrs. S. C. Fulmer, Little Rock.
 Historian—Mrs. C. W. Garrison, Little Rock.
 Publicity Secretary—Mrs. H. E. Murry, Texarkana.
 The Independence County Medical Auxiliary meets the

second Monday in every other month. The April 10th meeting was the semi-annual meeting of the Second District Medical Society and Auxiliary at the Batesville Country Club for seven o'clock dinner. Following the dinner the Auxiliary met in the lounge. Mrs. R. C. Dorr and Mrs. F. A. Gray were hostesses. Dr. R. J. Calcote of Little Rock addressed them on "Prevention of Blindness." Following this, the business session was held and reports heard from the various officers. The nominating committee presented the following new officers: President—Mrs. J. Joel Monfort; Vice President—Mrs. Paul Jeffery; Secretary—Mrs. L. T. Evans; Treasurer—Mrs. C. A. Churchill; Publicity Secretary—Mrs. F. A. Gray.

DOCTOR'S WIFE

Dinners in the warming oven
 Waiting for that man,
 Phone rings, "Sorry dear, operation
 Be home when I can!"

All dressed up for night of fun
 Waiting for that man,
 Phone rings, "Sorry dear, emergency
 Join you if I can!"

Duds packed up for pleasure trip
 Waiting for that man,
 Phone rings, "Sorry dear, hospital call
 Come later, if I can!"

(Mrs. Val) Jo Parmley, Little Rock.

The Woman's Auxiliary of Bowie-Miller Counties Medical Societies held the last meeting of the year Friday, June 2nd, at a beautifully appointed luncheon at the Chinese Lantern in Texarkana.

Hostesses were Mrs. H. E. Longino, Mrs. R. R. Robins, Mrs. N. B. Daniel and Mrs. J. F. Williams.

The table was lovely with a crystal bowl of gladioli, shasta daisies and pink and blue cornflowers.

Mrs. Roy Baskett presided over the meeting.

Mrs. L. J. Kosminsky gave a report of the Arkansas meeting held last month in Hot Springs, and Mrs. William Hibbitts gave a report of the national meeting held in St. Louis, at which she was one of the luncheon speakers.

Mrs. Chester Kitchens gave an interesting talk on her visit to Washington, D. C., where she attended many social affairs as the guest of her brother-in-law, Congressman Wade Kitchens.

A rising vote of thanks was given to Mrs. Baskett, Mrs. R. W. Pickett and Mrs. R. R. Robins for services to the auxiliary as officers.

The program consisted of an interesting paper on "European Drugs and Doctors," by Mrs. R. W. Pickett.

Mrs. J. G. Gladden of Harrison, Arkansas, publicity secretary, reports that Dr. and Mrs. Ross Fowler, and Dr. and Mrs. J. L. Jackson attended the A. M. A. convention in St. Louis.

Mrs. J. T. Irby of Earle, Arkansas, publicity secretary, reports: The last week in March at a lovely luncheon

meeting with Mrs. T. S. Hare of Crawfordville, the following new officers were elected: Mrs. J. T. Irby—president; Mrs. H. S. Watson—vice president; Mrs. John Blacklock—secretary; Mrs. J. H. Matthews—treasurer; Mrs. J. S. Hare—program chairman. A joint meeting with the county medical society officers is being planned for the next meeting in June. Also, the Auxiliary is planning a program to which the public will be invited, at which time an address will be presented on "Medicine and the Public."

Closing the year's program and installing new officers, the auxiliary to the Sebastian County Medical society met May 29th for a luncheon and program.

Mrs. A. A. Blair was hostess for the luncheon and presided at the business meeting. Officers installed were Mrs. I. Fulton Jones, president, succeeding Mrs. Blair, who automatically becomes vice-president; Mrs. W. F. Adams, secretary; Mrs. B. Wayne Freer, treasurer. Mrs. Blair expressed her appreciation for the co-operation of the members and presented the gavel to Mrs. Jones. Reports of the year's work, made by Mrs. W. F. Rose, publicity chairman, revealed that the auxiliary has donated \$10 to the state medical student loan fund, that under the chairmanship of Mrs. Raymond Smith, 28 subscriptions were sold to Hygeia, and that the auxiliary subscribed for the Hygeia for the Girls Club, Carnegie Library, Rosalie Tilles Children's Home, Young Women's Christian Association and seven rural schools.

The auxiliary contributed a vast amount of personal service in the promotion of health measures under the chairmanship of Mrs. W. R. Brooksher, Jr. Mrs. Ralph Weddington was a new member added to the Auxiliary during the year. Serving under the leadership of Mrs. Blair were the following officers: Mrs. J. S. Southard, vice president; Mrs. Charles T. Chamberlain, treasurer; Mrs. T. P. Foltz, secretary; Mrs. B. Wayne Freer, public relations; Mrs. Raymond Smith, chairman, and Mrs. B. B. Bruce of Alma, Hygeia committee; Mrs. D. W. Goldstein, chairman of the telephone committee, composed of Mrs. W. F. Adams, Mrs. Walter G. Eberle, and Mrs. S. P. Stubbs; Mrs. W. F. Rose, publicity chairman.

Highlights of the American Medical Association convention held in St. Louis were presented to the Auxiliary members by Mrs. D. W. Goldstein and Mrs. Everett Foster. Features of the state convention in Hot Springs were presented by Mrs. W. R. Brooksher, Jr., and Mrs. S. J. Wolfermann.

Mrs. Jones, the new president, announced the following committee chairmen and those who will serve with them: Public Relations, Mrs. Walter G. Eberle, chairman, Mrs. B. B. Bruce, Alma, Mrs. Eugene Stevenson; Hygeia, Mrs. S. J. Wolfermann, Mrs. D. W. Goldstein, Mrs. S. P. McConnell, Booneville; Telephone, Mrs. Charles T. Chamberlain, Mrs. C. S. Means, Mrs. Fred Krock; Program, Mrs. J. S. Southard, Mrs. E. C. Moulton, Mrs. Charles S. Holt; Health, Mrs. T. P. Foltz, Mrs. A. F. Hoge, Mrs. Raymond Smith; Publicity, Mrs. W. F. Rose.

Members present for the luncheon were Mrs. A. A. Blair, Mrs. I. F. Jones, Mrs. C. T. Chamberlain, Mrs. Ralph Weddington, Mrs. M. E. Foster, Mrs. S. J. Wolfermann, Mrs. B. B. Bruce, Alma, Mrs. Raymond Smith, Mrs. W. R. Brooksher, Jr., Mrs. Walter G. Eberle and Mrs. W. F. Rose.

Mrs. W. F. Rose, Publicity Chairman for the Auxiliary of the Sebastian County Medical Society.

BOOK REVIEWS

Trauma and Internal Disease: A basis for Medical and Legal Evaluation of the Etiology, Pathology, Clinical Processes Following Injury. By Frank W. Spicer, A. B., M. D., F. A. C. P. Illustrated. Price \$7.00. Philadelphia; J. B. Lippincott Company, 1939.

The author has carefully reviewed and analyzed the literature to present a one volume study of the role of trauma as an etiologic factor in the production of disease. Early and late manifestations with end results are carefully evaluated. References in great detail are appended. This volume is of practical interest to the industrial surgeon and to those physicians who find themselves frequently called into court.

Clinical Biochemistry: By Abraham Cantarow, M. D., Associate Professor of Medicine, Jefferson Medical College; Biochemist, Jefferson Hospital; and Max Trumper, Ph. D., Clinical Chemist and Toxicologist; formerly in charge of the Laboratories of Biochemistry of the Jefferson Medical College and Hospital. With a foreword by Hobart A. Reimann, M. D., Professor of Medicine, Jefferson Medical College. Second Edition, Revised. 666 pages. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$6.00 net.

An important field in modern medicine difficult to analyze, but systematized in a masterly manner. The fruitful researches of our endeavors in experimental physiology and biology, clarifying the differences between functional normals and abnormals has increased their value in clinical medicine and surgery. The laboratory interest and research has offered new angles of approach to practical medical difficulties. Functional correlation and inter-dependence of endocrine and metabolic states is most essential in modern practice. The important field of biochemistry is expanding rapidly and its literature so voluminous that a systematized presentation meets the needs of the progressive physician. The apparent gap between the abstract and the clinical is slowly being closed by greater familiarity of factual data as applied to the patient, which after all is the problem. This clear, concise, logical presentation cannot be read and pondered without adding much to our fundamental understanding of biochemical imbalance in diseased states.

A Textbook of Clinical Neurology: By Israel S. Wechsler, M. D., Professor of Clinical Neurology, Columbia University, New York; Neurologist, The Mount Sinai Hospital; Attending Neurologist, Neurological Institute; formerly Attending Neurologist, The Montefiore Hospital, New York. Fourth Edition, Revised. 844 pages with 162 illustrations. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$7.00 net.

This textbook on neurology continues to be one of the best available. The chapter on the history of neurology, as in the former edition, is the first attempt to include such matter in a textbook on neurology. The subject-matter and illustrations present the different neurological problems in a readily understandable manner. The book is a valuable one for the internist as well as for the neurologist.

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The Practice of Medicine. By Jonathan Campbell Meakins, M. D., L. L. D., Professor of Medicine and Director of the Department of Medicine, McGill University. Second Edition, 1413 pages. Illustrated. St. Louis: The C. V. Mosby Company, 1938. Cloth, \$12.50.

The second edition has been increased in size and there are 16 more illustrations including 8 more in color than in the first edition. Appendicitis has been inserted in the new edition and diseases of intestinal absorption have been put into a separate section. Many conditions have been enlarged upon and several new conditions added to the work. The chapter on the introduction to the practice of medicine dealing with history writing, the approach to the patient and an analysis of the more common symptoms encountered is well written and exceptionally instructive.

The material is arranged by diseases of the various systems and is very comprehensive. Special emphasis is placed on symptoms, their cause and their significance, and also on signs and differential diagnosis. At the end of each chapter is a brief list of excellent references, most of which are easily available to the general practitioner and student. The excellent illustrations with charts and diagrams, relatively new to a work of this type, make the book a very practical aid in giving a vivid description of the disease, and are a much more effective means than a lengthy discussion.

This text is exceptionally well written, complete in every detail, includes the newest methods of diagnosis and therapy, and with the excellent illustrations, seems to be a worthwhile book on the modern practice of medicine for the general practitioner and student.

Roentgen and Radium Therapy. By A. J. Delario, B. A., M. D., Radiologist, Saint Joseph's Hospital, Paterson, New Jersey, and Community Hospital, Montclair, N. J. Pp. 362. Illustrated. Price \$8.00. Philadelphia: F. A. Davis Company, 1938.

In this volume the author has compiled from various sources the information on radium and roentgen therapy which has been of value to him, adding such charts and graphs which he has developed. The result is a most complete handbook of radiation therapy, practical in its application, concise in presentation. We consider it an essential volume for the radiation therapist. The third part which deals with the end results gives significant statistics, valuable for reference purposes.

Life and Letters of Dr. William Beaumont. By Jesse S. Myer, A. B., M. D., Late Associate in Medicine, Washington University School of Medicine, Saint Louis. Pp. 327. Illustrated. Price \$5.00. Saint Louis: V. C. Mosby Company, 1939.

The publishers deserve thanks for the reprint of this work, originally published in 1912, making the record of

the epoch-making, perseverance in research by Dr. William Beaumont in 1822. The story of Beaumont and his famous patient, Alexis St. Martin, is fairly well known to physicians throughout the world. With this volume it is possible to more properly appreciate the difficulties which attended Beaumont's search for more accurate knowledge, sufficient that the reader may well marvel at the deductions he made in the face of tremendous odds.

Diseases of the Nose and Throat. By Charles J. Imperatori, M. D., F. A. C. S., and Herman J. Burman, M. D., F. A. C. S. 726 Pages, 480 Illustrations. J. B. Lippincott Company, Philadelphia, 1939. Price \$7.00.

The second edition of this book within three years is offered as a textbook and as a book of reference. It is undoubtedly one of the best books ever offered in any language. A unique feature is the arrangement of the text. Symptoms, diagnosis, and treatment of disease are considered in order first, in each discussion. These are the matters first in the mind of him who uses the book for reference. Pathology and etiology follow with full discussion making for completeness as a text book. It is a guide for the specialist, the general practitioner and the student.

Not only are the frequent and important diseases fully discussed, but the milder ones especially those local manifestations of the general diseases.

The section on intra-laryngeal diseases is noteworthy, especially the indications for, and the methods of, surgical procedure. However, the reviewer wonders that no mention is made of tracheotomy as in itself a curative measure for papilloma of the larynx in children.

There is a very valuable section on allergy, one on physical therapy, and another on laboratory procedures which clear up many questions. It is impossible to enumerate all the good features of the work, but it is recommended to all who wish to be up to date. The authors are experienced teachers and experts in their field.

Superfluous Hair and Its Removal. By A. F. Niemoeller, A. B., M. A., B. S. Pp. 155. Price \$2.00. New York: Harvest House, 1939.

This book, by the author of "Feminine Hygiene in Marriage" and "The Complete Guide to Bust Culture," takes the guesswork and uncertainty out of this question and eliminates the dangers for the reader which go with a lack of knowledge. Every woman should know which methods of hair removal are harmless and those which are dangerous; which are temporary and which are permanent; which are painless and which are free of pain. This volume covers all, endorsing, rejecting and condemning the various types. In this helpful handbook will be learned what the foremost physicians and dermatologists recommend. The explanations are clear and the descriptions are adequate.

J. HARRY HAYES, B. S., M. S., M. D.
Thyroid and General Surgery

J. DONALD HAYES, A. B., B. S., M. S., M. D.
Fractures and General Surgery

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No. 3

AN ANALYSIS AND DISCUSSION OF POSITIVE FOOD REACTIONS IN 500 INDIVIDUALS AFFLICTED WITH ARTHRITIS OR RHEUMATOIDAL CONDITIONS

W. T. WOOTTON, M. D.
Hot Springs National Park

It seems desirable to have some idea of what foods are most frequently found giving positive reactions in those persons with a hypersensitive synovia; it seems imperative that a more enlightened knowledge of the effects of various diets on the arthritic be had. Practically all arthritic diets so far formulated have been based on clinical experience while the dietitian has frankly admitted a lack of knowledge in re the materes morbi of arthritis.

Parenthetically we should state that quite a number of arthritics who were studied gave no positive response to foods. Some of these had patent oral sepsis, necrotic tonsils or other foci of infection, still others had a bacterial allergy the source of which was merely surmised. These cases, naturally, were excluded from this study, however, quite a few who had both a bacterial and food hypersensitivity are included.

The writer has arbitrarily divided the foods used in these tests into several classes according to the frequency with which they gave positive reactions. Those appearing in the list in approximately 46% or more of the cases are considered as very high. Those reacting positively in from 20% and 45% of the cases are regarded as high. The medium classification ranges from 19% down to 13% and the low are those from 12% down to 5% while the very low group ranges from 4% to 1% or less.

TABLE No. I—VERY HIGH

	Seq.	No. Pos.	%		Seq.	No. Pos.	%
Milk	1	372	74	Oats	4	263	53
Shellfish	2	286	57	Beans	6	256	51
Wheat	3	267	53	Tomato	7	245	49
Condiments	4	263	53	Chocolate	8	243	49

TABLE No. II—HIGH

	Seq.	No. Pos.	%		Seq.	No. Pos.	%
Fish	9	187	37	Tea	12	142	37
Cottonseed	10	186	37	Lamb	13	122	24
Rye	11	186	37	Strawberry	14	100	20

TABLE No. III—MEDIUM

	Seq.	No. Pos.	%		Seq.	No. Pos.	%
Blackberry	15	96	19	Pork	28	73	15
Asparagus	16	89	18	Beef	29	69	14
Spinach	16	89	18	Lemon	30	68	14
Raspberry	16	89	18	Cabbage	31	63	13
Eggs	18	88	18	Pineapple	32	61	12
Mx. Nuts	18	88	18	Barley	33	60	12
Chicken	21	84	17	Grapes	34	59	12
Grapefruit	21	84	17	Apples	35	58	12
Figs	23	80	16	Corn	35	58	12
Onion	24	79	16	Buckwheat	37	56	11
Orange	24	79	16	Potato	38	51	10
Banana	24	79	16	Turnip	39	48	10
Coffee	27	77	15	String Beans	40	47	9
				Cherry	41	44	9

TABLE No. IV—LOW

	Seq.	No. Pos.	%		Seq.	No. Pos.	%
Apricot	42	40	8	Sw. Potato	50	30	6
Rhubarb	42	40	8	Peach	52	28	6
Rice	44	36	7	Celery	52	28	6
Eggplant	44	36	7	Kale	52	28	6
Cucumber	44	36	7	Gooseberry	52	28	6
Cocoanut	44	36	7	Pear	52	28	6
Prune	44	36	7	Sprouts	52	28	6
Olives	49	32	6	Lettuce	58	24	5
Beets	50	30	6	Squash	58	24	5

TABLE No. V—VERY LOW

	Seq.	No. Pos.	%		Seq.	No. Pos.	%
Pumpkin	50	20	4	Cantaloupe	69	14	3
Carrot	60	20	4	Goose	70	14	3
Mushroom	62	16	3	Turkey	71	13	3
Dates	62	16	3	Kohlrabi	72	11	2
Parsnip	62	16	3	Cranberry	73	10	2
Radish	65	15	3	Currants	74	7	1
Green Pepper	65	15	3	Soy Bean	75	5	1
Parsley	65	15	3	Duck	75	5	1
Hops	65	15	3	Watermelon	76	4	

It should be noted that under some headings a composite or family group has been included and in other instances members of a family are listed separately. In practice this was found necessary and so left in the tabulation. Condiments, for instance, include red and black pepper, mustard, horseradish, vanilla, ginger, garlic and cinnamon. No one condiment appears on the list 263 times though some member of the group does.

The shellfish are grouped; the bean family are all under one heading; turnips and rutabago are considered synonymously as are cabbage and

cauliflower, ripe and green olives, the grapes, beef and veal, and all fish.

This analysis is not offered as one of absolute reliability but rather that a general idea may be had of the potential danger of certain foods causing allergic synovitis that now largely go to make up the average arthritic diet.

Discussion

A preliminary word as to why these tests were made may possibly be in order. It is the writer's opinion that "allergic trauma" is responsible for practically all soft swelling in or around a joint; that trauma and resulting edema are necessary preliminary requisites to chronic atrophic arthritis; that "mechanical trauma" is the preliminary stage of hypertrophic changes. The trauma productive of practically all soft swelling in and around the joint (hydrarthrosis and perihydrarthrosis), the trauma of early life and the one that heralds the approach of an absorption of lime salts from an articulation bone end—producing the atrophic change—is practically always an allergic reaction to food or to a bacterial growth in a distal focus.

The trauma productive of the hypertrophic type of bone change usually results from wear and tear on the joint cartilage from normal or abnormal usage over an extended period of time plus sclerotic vessel changes, plus excessive weight bearing—all of which ends up in cartilage destruction and the hypertrophic bone deposit results from nature's abortive effort to restore cartilage, though this effort consistently ends up in callus formation.

It should be further emphasized that, although the allergic response of the synovia to an allergen may play no part in the production of an hypertrophic bone change, yet the synovia in such a joint is just as hypersensitive to allergens as that of a normal joint or one with an atrophic change, and therefore, from a practical standpoint we may consider all of the soft swelling in these joints as allergic in nature.

In as much as there are no sensory nerves in the articulating bone end or the callus formation thereof, the pain experienced by the hypertrophic arthritic is due to an irritation of the synovial membrane lining the joint. Hence the necessity of an allergic study of advanced cases of bone change in order to relieve pain and thereby pave the way for a restoration to function of these chronically contracted muscles, ligaments and fascia.

Being completely in accord with the foregoing theory an allergy study of each arthritic individual, now presenting, is made as a routine. On this basis 500 persons with arthritis or a rheumatoid condition, as neuralgia, neuritis, or myalgia have been studied with a view to the relief of painful symptoms, edematous joints, etc., without the aid of measures other than the removal of the offending foods from the diet and eradication of foci of infection when possible or practical.

That these foods may and do actually produce a synovitis can be attested by a group of individuals scattered over several states who were studied by the writer and who can now bring on an attack of synovitis at will by indulging certain known allergenic producing foods, and quite as easily rid the joints of pain and swelling by abstinence.

If there is an allergic background to the food antagonism experienced by most arthritics it must be apparent that the benefit derived by the gouty individual when his whole dietary regime is overhauled and many so called rich foods are eliminated comes from depriving him of his source of allergens rather than that specific types of foods, as fats, carbohydrates or proteins specifically cause gout or arthritic. To make this admission is to refute the idea of a sound basis for a low carbohydrate, high fat or any other combination of food substances generally supposed to be of benefit to the arthritic subject.

We should rather conceive of an arthritic diet as being "tailor made," or specifically arranged for each individual arthritic, primarily according to each individual's sensitivity to such foods and secondarily, in accord with the normal bodily requirements.

It is the writer's opinion, based on practical application, that many of the foods to which the arthritic responds with a positive reaction do not cause a synovial reaction. In many instances only one or two out of a dozen were responsible for joint symptoms. However a good many arthritics with allergic synovitis have other allergic manifestations, such as urticaria, rhinitis, sinusitis, migraine, neuralgia, angioneurotic edema, mucus colitis, etc. In one instance, wheat caused both a colitis and synovitis, and both conditions recur constantly after the ingestion of wheat while the patient remains completely free as long as it is omitted in all degrees from the diet.

Another arthritic was so sensitive to wheat that pains would recur in the spine, hands and knees

from eating the white meat of chicken that had been baked with bread crumbs as a stuffing.

A patient markedly sensitive to fish and shellfish had all symptoms of pain and swelling disappear through abstinence from these allergens. Shortly after returning home she had a recurrence and it was finally discovered that she was taking "Vitamins" in a fish oil base. Elimination of the vitamin capsules did away with the swelling again.

We have never found condiments causing a synovial reaction.

We think that some arthritics tolerate a small dosage of allergens from one source but when the same amount is added from several other sources the total allergen dosage is sufficient to cause a reaction.

It is our belief, based on observation of the reactions, that many people lose their hypersensitivity to seasonal foods, during the off season, only to become acutely sensitive again when the food is eaten once or twice a day, day in and day out. This is notably true of strawberries, radishes, cantaloupe, and a few of the vegetables that are not eaten fresh or canned throughout the year. The soy bean has not as yet come into such universal use as a food as to be the source of allergens in numerous instances and until it does begin to be a frequent offender it comprises a valuable source from which we may acquire a substitute for cows milk.

This brings us to a consideration of the one food that is considered *sine qua non* in the diet of every arthritic (not studied from an allergic standpoint) and that is milk, both because of its food value and its calcium content. In this study we find it heading the list of foods that cause a synovial reaction. Three out of each four were found sensitive to it. Beef, so long considered the *bete noire* of rheumatism, stands 29th on the list while lamb is 13th. Bananas, oranges and grapefruit are well up on the list possibly because they are so abundantly used in diets. We also find wheat, oats and rye, universally eaten, are frequent offenders.

We would anticipate finding the tomato and chocolate as ranking high as allergen producers and likewise shellfish and fish, but cottonseed oil products are comparatively new additions to our dietary and therefore rank surprisingly high.

It has been our clinical experience to find that one or maybe two out of a possible dozen positive reactions were actually responsible for the synovial reaction, but as there are usually one or

more complications of an allergic nature, rhinitis, colitis, etc., all offending foods have to be eliminated *pro tem*.

In these acquired allergies the writer has "guessed" that three months is an average time for a person to become automatically desensitized and thereafter forbidden foods may be experimentally resumed at three day intervals. In many instances it works. In others they have so far gained no tolerance.

RESOLUTION

On the Death of Dr. J. F. Gill Which Occurred June 18th, 1939

Mr. President and Fellow Members of the Jefferson County Medical Society:

Dr. J. F. Gill, our friend and honored associate, after a long and useful career among us, has paid the last debt of nature. Dr. J. F. Gill had been a member of this Society since coming to Pine Bluff.

During his active life as a physician, he was always honored and respected by his associates as the highest type of an ethical physician. It was always a pleasure to be associated with him professionally. He always responded to every call of the sick or injured without question of personal remuneration. His field of activity covered a long territory, going many miles into the country. He responded to these hardships of his profession without complaint.

He was a Christian gentleman of the highest class, honored and loved by his Church. He loved the fellowship of his fellowmen.

We feel that this Society has lost one of its best members, and the community has lost one of its best citizens. We extend our sympathy to Dr. Gill's family and friends.

Resolved: A copy of this resolution be sent to Mrs. Gill, a copy sent to the Arkansas Medical Society, and a copy be spread on the minutes of the Jefferson County Medical Society.

Respectfully submitted,

J. M. LEMONS,
W. T. LOWE,
C. K. CAPEL.

COMING MEDICAL MEETINGS

Fifth Councilor District Medical Society, Camden, October 5th.

Southern Medical Association, Memphis, November 21-24th.

THE USE OF X-RAY IN CHEST EXAMINATIONS BY THE PHYSICIAN IN GENERAL PRACTICE*

J. D. RILEY, M. D.
State Sanatorium

Since the introduction of the stethoscope, no accessory aid has come to us which has proved its value in the diagnosis of diseases of the chest as has the roentgen ray. The increasing importance of roentgenology in the diagnosis of chest conditions has rendered a knowledge of the interpretation of chest films desirable for every physician. While it is true that the clinician need not become expert in such interpretations, it is almost essential that he have some knowledge of this new science for the best execution of his work. The roentgenologist need not be expert to understand the principles underlying physical diagnosis; likewise the clinician may obtain a practical acquaintance with the principles of X-ray interpretation, even though expert knowledge is not obtained. A mutual exchange of knowledge is essential to a broad understanding of both subjects.

The thoracic viscera may be studied either by fluoroscopy or by radiography. Fluoroscopy is useful for a preliminary orientation, to view the movement of the diaphragm, to study the movement of fluid levels in the pleura and in the lung and to observe the mediastinum in the various oblique positions. It is indispensable in the X-ray study of heart and aortic conditions. It is of uncertain value in the recognition of infiltration in the lung as in tuberculosis. For this purpose a film examination is indispensable.

Stereoscopic films are of value to indicate the depth of a pulmonary lesion. In tuberculosis, especially, they resolve the shadows into their components and, thus, give a truer idea of the density of the infiltration. Stereoscopy can, however, usually be dispensed with, as the data it furnishes does not materially differ in character from that found in a good single film.

During the last few years sectional roentgenography has been introduced and is destined to play a big part in localization of and better detail in a selected section of the chest or, as for that matter, any part of the body. Sectional roentgenography is an application of radiography whereby the rays are, in effect, focused upon a plane or thin section of the body with the shadows of objects outside of the plane blurred

to a greater or lesser degree. The principle of the method was independently discovered by a number of investigators who coined different terms to describe their invention and so the different types of apparatus for accomplishing sectional roentgenography are today known under such terms as the tomograph, the stratigraph, the planigraph and the laminagraph. In the future sectional roentgenography of the chest will play an important part in the localization of cavities and the application of proper surgical measures.

The importance of X-ray in diseases of the chest has assumed such a large role that only a few points can be touched in a short article. The radiograph must be made with careful and uniform technique. The interpretation of the film is frequently based on minor changes in line or shadow that must be shown so clearly that no doubt may exist as to their presence; in no other department of radiology is there so much temptation to read into the film changes that are not there. An X-ray picture should be as light as will still permit a line of demarcation between the vertebral column and that portion of the cardiac shadow to the left of the vertebral column. Stereo-roentgenograms, or films, are now being made with such skill and precision that it is possible to obtain a very clear view of the lung in its most minute anatomic detail, and to observe with ease any abnormalities which may be present.

While recognizing thus the great diagnostic value of the roentgen ray, we should be reminded that it is only an accessory aid and cannot take the place of the clinical history, symptoms, the microscope and physical findings in arriving at a diagnosis. In other words, the clinician who undertakes to make his diagnosis purely as a result of a study of X-ray films, no matter how clear they may be or how good he may be at interpreting them, is destined to meet with disaster sooner or later.

It must be remembered that like any diagnostic method its value will be measured by the technical skill of the physician in the making of the films no less than his ability to interpret them. The film must be clear and its markings well defined in order that the normal shadows may be distinguished from the pathological. The interpretation of hazy, or otherwise imperfect films, has as little justification as a physical examination of the lungs without disrobing the patient.

In considering tuberculosis of the lungs the X-ray evidence of the same presents a different picture at different stages or in different forms

*Read before the Sixty-fourth Annual Session of the Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

of the disease. Primary or childhood tuberculosis usually shows enlargements of the tracheobronchial glands and Ghon's tubercle. Early childhood tuberculosis evidenced by a positive tuberculin test may fail to give any positive X-ray findings. However, after a period of time the tracheobronchial glands may be enlarged and Ghon's tubercle may appear.

Reinfection tuberculosis or tuberculosis in the adult has a characteristic appearance but no single typical picture. The interpretation of a condition from a radiograph as definitely or probably tuberculous depends upon logical deduction from all the evidence at hand, and not upon a comparison between the radiograph on the view box and other similar pictures that resemble it more or less closely. Fortunately the pathological changes in the lungs show clearly in comparison with the air-filled spaces that surround them.

As is well known, the typical tuberculous nodule is built up from a number of microscopical tubercles, each surrounded by its zone of exudative reaction, forming an asymmetrical, conglomerate mass from 2 to 20 mm. in diameter. Usually it is the exudate that casts the shadow. The exudative zone varies in width, in demarcation, and in density depending on the degree of the reaction. Thus if the disease is limited in extent and in virulence the nodules are discrete, definite, and clearly seen. But if the infection is massive or virulent the zone of reaction may be extensive, with no trace of its nodular points of origin; or if the nodules are closely set, neighboring zones may overlap to form a confluent mass. This relation between exudate and virulence is so close that it has been considered evidence for or against activity; as evidence it is not as reliable as other sources of information, secured clinically.

Clinical activity cannot be determined by an X-ray film but must be determined by taking into consideration the clinical symptoms of the patient over a sufficiently long period of time.

A single X-ray film of the chest is a record of what is in the chest. More than one X-ray film with a sufficient time interval is a record of what is happening in the chest, and by serial roentgenograms one can arrive at definite information as to the pathological activity which must be distinguished from clinical activity. Pathological activity is how much tuberculosis is in the chest which may be progressive or retrogressive. Clinical activity is how sick the patient happens to be because of the tuberculosis in his chest as revealed by his clinical symptoms.

There are many conditions that may cause the appearance of small opacities in the lungs, but tuberculosis has certain features that are characteristic when considered together, and in the sequence of their development.

Calcium salt deposit changes the appearance of a nodule from a gray shadow to white. It is evidence that the particular nodule is healing, but is not proof that the nodule is completely and permanently healed. The amount of calcium salt deposit varies from a slight change where the process is beginning, to the dense clear white shadow of the "lung stone."

Cavities. Some nodules caseate at their center. The density remains the same as before, and the shadow cast is not altered unless further changes occur. But if the caseated mass is liquefied by the action of pyogenic or tubercle bacteria, it usually opens into a bronchus. The liquid mass is expelled and a cavity is formed. Air enters the cavity; as the air is radiotransparent and the walls of the cavity are opaque, a definite shadow is cast on the film. The cavity shows as a dark space completely surrounded by a white shadow that is elliptical or circular. Surrounding the white line is a narrow band of increased density, irregular in contour, representing tuberculous granulation tissue and fibrous tissue. Surrounding this again is a zone of lesser density fading out toward the surrounding lung, representing the zone of exudative reaction. If the cavity is 1 cm. or more in diameter, and the zone of reaction is thin, there is little difficulty in the interpretation. But if the cavity is less than 1 cm. in diameter or if the zone of reaction is broad, it may escape detection. A cavity may be so large as to completely excavate an entire lobe. If located close to the lateral wall it may simulate a pneumothorax. The size, location, and number of cavities affords an important guide in the treatment of the patient.

Connective tissue formation is stimulated by the tubercle bacilli. The amount varies with the degree of the infection, the type of bacilli, and the resistance of the individual. The least grades are shown only by distortion of the linear markings. More extensive deposit of fibrous tissue displaces the trachea toward the affected side, displaces the base of the heart, displaces the hilum upward, and narrows the intercostal spaces. When the reaction is extreme there are bands and sheets of fibrous tissue traversing the lungs in all directions. When the pleura is involved fibrous tissue may bind the parietal to the visceral layers, forming small or large adhesions.

There is predilection for certain definite parts of the lungs. The upper lobes are first invaded in a majority of cases, where the tuberculous nodule is usually seen in the periphery, about 1 cm. from the pleura. The extreme apex may show one or several nodules directly on the pleura, forming the "puckered scar" so often encountered in autopsies. More commonly the visible lesion is lower than the extreme apex, in the second interspace opposite the axilla. As the disease advances the number of nodules increases so that extensively invaded lungs may show multiple lesions in all lobes.

One important diagnostic point in tuberculosis is that when dealing with more than minimal tuberculosis, there is nearly always evidence of the disease in the other lung.

Pleural involvement is always present to some degree. This may be so slight that no evidence is present in the radiograph. There may be a "pleural cap," a sheet of fibrinous pleurisy extending over one or both upper lobes, diminishing in thickness from above downward; in the affected area the film is shaded, and the linear markings obscured. The shading caused by thickened pleura is slight; it is comparable in density with the shadow of a well-developed pectoralis major. The thickened pleura may extend between the lobes; when this occurs between the upper and middle lobes the direction of the ray is such that the sheet of thickened pleura is caught on edge and a dense white shadow is seen. But when it occurs between the middle and lower, or between the left upper and lower lobes, the thickened pleura is caught diagonally and no shadow appears on the film as taken in the usual postero-anterior position.

Miliary Tuberculosis. If the infection is hematogenous in origin the tubercles form simultaneously in a large part of the lung field, sometimes in all parts of both lungs. Dissemination may be incomplete, when a part of one lobe is seeded from a focus in the same lung. The tubercles break into the air passages only late in the disease. Consequently there is at first no expectoration, no excretion of bacilli, no rales, and no physical signs. The X-ray film shows innumerable small opacities which slowly increase in size as the case progresses. If the individual has acquired a certain amount of resistance, as when the dissemination is from a focus in a tuberculous kidney, development may be slow, lasting six months or more. When the

resistance is lower, the termination will occur in less time. Exceptionally, if the seeding is sparse or the resistance high, there may be clinical recovery.

Lobar and Bronchopneumonia. Clinically lobar pneumonia is justly called "frank" and radiographic assistance is not often sought until complications arise or are suspected. However, an X-ray film of lobar pneumonia is easily recognizable, usually involving one or more whole lobes. Sometimes an X-ray film taken early before consolidation is complete cannot be recognized as lobar pneumonia and the same is true after resolution has reached the point where the lobe is no longer solid. Bronchopneumonia, being more persistent, is often found on roentgenograms and is sometimes mistaken for tuberculosis. Pneumonia, either lobar or bronchopneumonia, may be easily differentiated from tuberculosis by taking into consideration the clinical history, physical findings, and, if necessary, subsequent rapid changes on roentgenograms not to be expected in tuberculosis.

Lung Abscess. Lung abscess must be differentiated from tuberculosis. Sometimes the odor of the breath is highly suggestive of lung abscess. The clinical history and physical findings are usually very helpful in differentiation. Nevertheless, clinically and radiographically there is a resemblance between lung suppuration and pulmonary tuberculosis. Both are usually chronic diseases and both are associated with lung destruction and cavitation. They may be differentiated, as tuberculosis affects the upper lobes, while lung abscess typically affects the lower; tuberculosis has a multiple distribution and commonly affects both lungs; lung abscess is localized in one lobe, tuberculosis is manifested by characteristic nodules at some point, lung abscess is not. Fluid may usually be demonstrated within the abscess as a white shadow; its upper level horizontal, its lower limit conforming to the shape of the cavity. Radiographs taken in various postures show shifting of the fluid within the abscess.

Bronchitis causes irregular enlargement of hilum shadows and accentuation of peribronchial markings, especially of lower lobes. Involvement is always bilateral. In acute bronchitis, individual markings are "soft" in appearance and lack the sharp definition seen when the disease becomes chronic. In chronic bronchitis there is sharper delineation of individual markings due to fibrosis

which usually can be differentiated from the "softer" appearance due to acute infection.

Influenza. In influenza there is nothing characteristic in the roentgenographic appearance to distinguish it from an acute bronchitis due to any other cause. The accentuation of the hilum shadows is usually more pronounced than in ordinary acute bronchitis. The increase in markings may persist for a week or so after the subsidence of clinical symptoms. Pneumonia following influenza appears in several different forms, has no characteristic appearance, and may present the picture of bronchopneumonia, septic pneumonia or, very rarely, a true lobar pneumonia.

Bronchiectasis. When a patient raises large quantities of sputum negative for tubercle bacilli with very little physical or X-ray findings, bronchiectasis should be suspected. The introduction of iodized oil followed by an X-ray film will usually establish the diagnosis of bronchiectasis.

Pleural effusion. Pleural effusion, pus, or blood, cast the same dense white shadow. The fluid drops to the most dependent portion of the chest unless prevented by adhesions. Minimal amounts are seen in the costophrenic angle. Larger amounts float the lower lobe of the lung upward; the upper fluid level is sharp, and distinct, the line running in a curve from the mesial aspect upward and outward to the lateral chest wall. As the amount increases, the heart and mediastinum are pushed toward the opposite side.

Pneumothorax. Pneumothorax may be spontaneous, or result from some chest injury or be induced therapeutically. When present, the edge of the more or less collapsed lung can be seen at a variable distance from the chest wall, the space previously occupied by it showing an absence of lung markings. Whenever air and fluid are simultaneously present in the chest the latter acquires a horizontal level. This fact is of importance in diagnosis, as the presence of such a level in the chest, if not due to a cavity in the lung, always indicates air in the pleural cavity. Air and fluid in the pleural cavity is known as hydropneumothorax. Air and pus in the pleural cavity is known as pyopneumothorax. It is frequently noted in cases of pleural effusion in which incomplete aspiration has been performed and a small amount of air accidentally introduced. It portrays faithfully any number of sacculations in a case of hydro- or pyopneumothorax with

adhesions in which each pocket of pus has its fluid level with a bubble of air above it, the former shifting immediately on change of position unlike effusions without air.

Chronic interstitial pneumonia. Chronic diffuse fibrosis (chronic interstitial pneumonia or cirrhosis of the lung) produces a dense but rather irregular shadow, often showing definite cavities (bronchiectasis in origin), never sharply confined to one lobe, but most frequently involving an entire lung. When it is confined to the upper portion of the chest it does not show an abrupt straight-line lower border. There is always accompanying evidence of scar tissue retraction; decrease in width of the involved side of the chest; a narrowing of the interspaces and pulling over of the trachea and mediastinal structures toward the involved side. It often resembles tuberculosis over an entire lung but an important differentiating point is the absence of any tuberculosis in the other lung.

Atelectasis. Atelectasis is a condition in which the lung is without its normal air content. The alveolar walls are collapsed and the lung becomes densely solidified. The condition may be either congenital from failure of the lung to expand at birth, or may be acquired by a previously well-inflated lung from pressure of an aneurysm or growth, from occlusion of a bronchus by foreign body or tumor, or following an operation or injury, or without apparent cause, so-called "massive collapse of the lung." Whatever the cause, certain general roentgenographic characteristics are always present. The atelectatic area shows in the roentgenogram as a dense consolidation, homogeneous in character. The side of the chest involved is narrowed, there is elevation of the diaphragm, narrowing of the interspaces and deviation of the heart and mediastinal structures toward the involved side. The lung is smaller in its deflated state than the cavity which it is designed to occupy, which results in a partial drawing of the chest wall to conform to its size when collapsed.

Silicosis. Silicosis (pneumoconiosis, anthracosis) is a disease caused by the inhalation of free silica. It is found in hard rock miners, granite cutters, anthracite coal miners, and to a lesser extent, among soft coal miners and coal handlers. The lung changes are slowly progressive, the rate of change depending on the quantity of inhaled silica, and on the individual. Three stages are described.

First stage. The hilus enlarges; small densities, varying in size from 2 to 5 mm., appear at the bifurcation of the bronchi; the interlobar septa and the linear markings are beaded. These changes affect the center of the lungs more than the periphery, the right side more than the left.

Second stage. As the silica inhalation continues, the small densities increase in number and in size, but the hilus density decreases. The distribution continues to be central, both the number and the size of the lesions are less toward the periphery; the apices are usually clear, as is the extreme base. Unless the individual is withdrawn from his exposure to silica the process continues to advance and a haze appears over the upper lobes.

Third stage. Fibrous tissue is laid down, which distorts lung structure, renders the lung inelastic, displaces the contents of the mediastinum, and contracts the thorax. Up to this stage relief from exposure to the inhalation of silica is followed by regression in the lung changes.

Silicosis is frequently complicated by pulmonary tuberculosis. Uncomplicated silicosis seldom affects the upper lobes or the periphery of the lung; lesions occurring in these places are likely to be tuberculous in origin. The differentiation is difficult, uncertain, and not to be relied upon. In the later stages silicosis and tuberculosis may present an identical appearance on the film.

Other mineral dusts, and even inorganic dusts in heavy doses, are said to cause changes resembling those due to silica, although less in degree.

Tumors. Tumors in the chest are metastatic or primary. Metastases to the lungs may complicate malignant disease in any part of the body, and are often found in cases of bone sarcoma, carcinoma of the breast and hypernephroma. Primary tumors of the chest are less frequently encountered. They comprise one per cent of all carcinoma. Whatever the class of malignant disease: carcinoma, sarcoma, hypernephroma, thyroid tumor, or other, the shadow of the growth on the film is similar, and differentiation by the appearance of the radiograph is unreliable. It is convenient to describe metastatic malignancy separately from the primary lesions, but it is evident that a solitary metastasis may run a similar course and give the same picture as does the single primary focus.

Differentiation is from those conditions that most nearly approximate the picture at the moment. The radiologist rarely sees the patient when malignant disease of the lung is in its early stages; usually the patient experiences no discomfort at first, and seeks medical advice only after the tumor has attained considerable size or one of its sequelae has developed. It is seldom advisable to make a diagnosis on the evidence given by the films taken at any one time; dependence may be placed on repeated examinations, correlated with the clinical findings. Among the conditions that may imitate the radiographic appearance of lung tumor, hilar adenopathy, tuberculosis, lung suppuration, and chronic interstitial pneumonia are the most troublesome.

Mediastinal or hilar adenopathy, whether caused by tuberculosis or lymphoblastoma, is usually bilateral; malignancy is unilateral. An adenopathy is sharply demarcated throughout its entire outline; malignant disease, even the massive type, shows an area at some point where the delineation is not well defined. Tuberculosis is rarely confined to one lung. Cavitation may be present in both tuberculosis and malignant disease, but in the tuberculous lung there is associated fibrosis, in malignant consolidation there is not. The tuberculous lung may be reduced in size, as may the lung site of malignant disease associated with atelectasis; but the tuberculous lung is irregularly puckered, the malignant growth is evenly collapsed. In the terminal stages of a malignancy the two conditions may be exactly similar and differentiation must rest upon the history. In miliary tuberculosis the lesions are multiple, small and discrete; in miliary carcinomatosis they are also multiple, small, and at first discrete, but later coalesce. Acute pleurisy with effusion may give an identical clinical onset and closely resemble the picture of malignancy with pleural involvement. In cases of malignant disease thoracentesis withdraws bloody fluid, and the radiograph taken afterward continues to show the same density. Chronic tuberculous pleurisy with thick caseous masses casts, the same dense shadow as does the pleura thickened by tumor, even in the absence of effusion. Lung suppuration, especially when of long standing, may closely resemble a broken-down tumor with cavitation; but an old lung abscess is smooth and rounded; the cavity in a necrotic tumor is uneven and nodular. Chronic interstitial pneu-

monia may resemble malignancy with areas of atelectasis, but runs a different course and has not the same clinical history. Benign tumors of the lung may exactly resemble a parenchymal lesion; but benign tumors are rare, and may be diagnosed only after the progress of the case has definitely excluded malignancy. Echinococcus cysts of the lung are definitely circumscribed spheres which displace lung tissue.

Actinomycosis seems to have its initial site of infection at the periphery of the lung, very similar to tuberculosis. Ordinarily, however, actinomycosis involves the peribronchial structures of the lower lobes, whereas tuberculous infection predominates in the upper lobes. The tissue reaction is also quite similar and as a result the roentgenographic picture produced is not distinguishable. The disease is often chronic, presenting little, if any, change demonstrable in the roentgenogram over a long period of time. Blastomycosis gives a picture very similar to an infection with actinomycosis. There is usually greater tendency to development of large bulky consolidations however. Actinomycosis, blastomycosis and other fungus infections may cause large areas of consolidation and extensive cavity formation which cannot be distinguished from lung abscess or tuberculous cavitation. Finding the organisms in the sputum is the only way in which the diagnosis can be made.

In conclusion, it is hardly to be expected that all clinicians can become expert in the interpretation of chest films, yet it is very desirable that they have some knowledge of this subject. If they expect to do good work, it is even more essential to them to have good clear films, than it is to the radiologist who sees films day after day. In turn, it is too much to expect of the radiologist that he have an intimate knowledge of the physical signs and symptoms of the chest diseases. For these reasons, close cooperation between the clinician and the radiologist is most apt to work to the patients advantage.

A radiograph of the chest is a record of the morbid processes in the lungs. It is comparable with a postmortem examination, except that the examiner is deprived of the sense of touch, of resistance, and of color. In many instances a disease is so well marked, its features so definite and characteristic that any skilled pathologist could venture a diagnosis on merely viewing the cut surface of the lung. Similarly the radiologist can draw positive inferences when the case under

consideration is average, well marked, and definite. But just as the pathologist would refuse an opinion on any but the most definite case, so the radiologist should confine himself to indicating a number of possibilities, and leave any decision to a conference between himself and the clinician. Taken in this way, as a means of securing information, and not as a direct and exclusive method of diagnosis, the X-ray film of the chest surpasses all other diagnostic methods in value.

The X-ray examination of the chest is indispensable to the diagnosis and understanding of diseases of the chest, when employed in conjunction with other methods at one's disposal; and when this fact is recognized more generally, much higher standards of efficiency in the field of medicine will be attained.

A Statement Concerning the
**HOSPITAL OF THE UNIVERSITY OF
ARKANSAS SCHOOL OF MEDICINE**

STUART P. CROMER, M. D., Dean
University of Arkansas School of Medicine

Since the University Hospital has a limited bed capacity, it must of necessity use all of its facilities for teaching purposes. The City of Little Rock contributes to the cost of caring for patients who are residents therein. Notwithstanding this arrangement, it will not be possible to admit all Little Rock patients who may need and apply for hospitalization.

From time to time it doubtless will be necessary to limit or expand the number of particular types of cases, e. g., more pneumonia patients may be admitted one month while the next month a large percentage of patients suffering from gastro-intestinal complaints may be admitted, etc. The number of cancer patients admitted will be limited by the facilities for therapy as well as by the number of beds available for this type of patient.

When patients outside of Little Rock are admitted, a contribution to the cost of hospitalization comparable to that made by the City of Little Rock will be expected.

Each patient admitted must have a statement from the local doctor indicating the diagnosis and the period of hospitalization since as a rule it will not be possible to keep any patient longer than three weeks. In addition the county welfare director must furnish a statement concerning the economic status of the patient, the financial arrangements made with the hospital and assurance that patient will be removed when discharged. County judges desiring to place any patient in the University Hospital should contact the local welfare director.

Due to the need for extensive repairs and remodeling, the total number of patients admitted cannot be increased within two or three months from this time.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

WHAT is the physician to think when the X-ray examination and the tuberculin test do not confirm each other? Dr. Esmond R. Long, Director of the Henry Phipps Institute in Philadelphia, discusses this situation in an editorial in the April, 1939 issue of the *American Review of Tuberculosis*.

The question of anergy to tuberculin in the presence of presumptive tuberculosis has been the subject of much recent discussion. Especially noteworthy have been the carefully conducted and concisely reported studies of Lumsden, Dearing, and Brown on tuberculosis infection in school children in Coffee County, Alabama, and Giles County, Tennessee, which were reported recently in the **American Journal of Public Health**. These investigators compared the incidence of positive reaction to several different kinds of tuberculin, in relation to the incidence of lesions diagnosed as tuberculosis in X-ray films, and found not only a lack of correlation between the tuberculin reaction and the presence of shadows in the X-ray film interpreted as representative of tuberculous lesions, but a wide discrepancy in the percentage of positive reactions to different samples of tuberculin. The lack of correlation between tuberculin reaction and X-ray examination was most conspicuous in the case of films showing shadows interpreted as calcified lesions of primary tuberculosis.

Significance of Calcifications

Numerous observers have noted the absence of tuberculin allergy in cases with presumptive evidence of old tuberculous infection in the form of calcified intrathoracic masses with the frequency of negative reaction in the presence of pulmonary calcifications ranging from 17 to 46 per cent in different series in the hands of different observers.

These various studies have provoked widespread comment. It is not the fact that allergy may be absent in the presence of calcified lesions that is surprising, but that this may occur so frequently. Failure of reaction in the presence of calcified nodules is an old observation familiar to all workers in the field. In passing, it may be noted that in the first article published on

the use of the Purified Protein Derivative of Tuberculin certain cases with pulmonary calcification were recorded, with failure of reaction either to this type of tuberculin or Old Tuberculin.

Most investigators in the past interpreted these cases as illustrations of obsolete infection, and there is increasing reason to accept this explanation. Specific examples with calcification, once positive and subsequently of lowered sensitivity or even negative to tuberculin, have been frequently recorded. A plausible explanation of the waning of allergy is to be found in reports of the sterility of most of the old calcareous foci of primary infection.

Allergy and Recovery

More direct and significant evidence, however, on the waning of allergy with recovery from active lesions of tuberculosis is available in the records of BCG vaccination. Hundreds of thousands of human beings have been deliberately inoculated with controlled dosage of the attenuated but living BCG, and careful records have been kept of the intensity of the tuberculin reaction in relation to the course of the infection set up. In practically all of those infected intracutaneously with 0.15 mg. BCG or more, the reaction becomes positive in a few weeks. After reaching a period of maximum intensity it then tends to wane, and becomes negative after twelve months.

In the light of these observations of complete healing with eventual sterility of spontaneous human lesions, on the one hand, and decreasence and disappearance of the allergy produced by artificial human infection on the other, it would not be surprising if the tuberculin reaction eventually became negative in **all** of the cases of calcified primary lesions, if no further infection occurred. Indeed there is good reason to believe that in many cases of positive tuberculin

reaction in the presence of calcified foci of tuberculous infection, the reaction is positive not because of the presence of the calcified lesion, but because of a later superinfection.

With the general decline of tuberculosis in the community, with corresponding lessening opportunity for reinfection, it is only to be expected that an increasing number of non-reacting cases with calcification will be found. It is well to keep the fact in mind that the calcified lesions discovered in any survey today represent not the index of tuberculous infection of the present period, but the remains of tuberculous infection in the past.

Moreover, there is still room for doubt that all the lesions commonly diagnosed as calcified nodules of primary tuberculosis are really tuberculous. Particularly in a community where calcifications are present in half of the adolescent population, as in certain of the regions studied by Lumsden and Gass and their colleagues, it is pertinent to inquire if there could be any other cause than tuberculosis for the calcifications found.

Anergy

Anergy in the presence of active tuberculosis of the primary or "childhood" type has been less frequently recorded and in some cases merely represents delay in the appearance of allergy. It was pointed out long ago that X-ray evidence of developing primary tuberculous infiltration of the lung may precede the development of a positive reaction. Anergy in the presence of well established lesions believed to be tuberculous is subject to much uncertainty, because of the difficulty in proving the diagnosis of primary tuberculous infection in these cases. The shadow itself is not distinctive, and it is the course of the lesion rather than its character, as seen in the X-ray film, that is important. Infiltrations that disappear are apt to be of pyogenic origin; those that persist are probably tuberculous. Most of the reported cases of anergy in the presence of active primary tuberculosis have not been given the benefit of a time trial. A diagnosis based on persistence of the infiltration, is still subject to much question, for increasing understanding is bringing to light other causes for such infiltrations, such as unresolved pyogenic infections, bronchiectasis, etc. In brief, in a case of tuberculin anergy in the presence of supposed active primary tuberculosis, the burden of proof is on the diagnosis of tuberculosis.

As to the necessity of a reliable tuberculin there can be no argument. It is true and has been known for years that the various preparations of Old Tuberculin on the market vary greatly in their capacity to elicit reaction. It was this fact that led to the search for a substance of specificity, stability and constant potency, that could be substituted for the highly variable Old Tuberculins in use. It is hoped that the Purified Protein Derivative of Tuberculin will fulfill this need.

Tuberculin in Case-Finding

For present purposes a distinction must be drawn between tuberculin-X-ray surveys for the separate purposes of determining the infection index regardless of morbidity, and tuberculosis case-finding. No serious doubt has been expressed over the value of tuberculin as a mechanism for detecting ordinary cases of pulmonary tuberculosis. The studies cited, do not deal with this subject. On the other hand, studies of the tuberculin reaction covering more than thirty years, show that the overwhelming majority of patients with frank tuberculosis are positive to tuberculin; that they react to small doses and to most of the many types of tuberculin on the market. Clinical disease has not infrequently been observed to develop with alarming rapidity after the development of a positive tuberculin reaction, while there is no proven record of its development in the absence of a positive reaction.

In the light of this experience no reason is apparent to depart from the present established custom of using tuberculin in case-finding programs.

On the other hand, good reason has been given for pause in our efforts to determine epidemiological indices of the amount of infection until more knowledge is obtained. The concept of infection that is adopted will have to meet the issue of existing as opposed to obsolete invasion by tubercle bacilli. From a practical standpoint it seems doubtful if there is nearly as much significance in determining how many ever have been infected by tubercle bacilli, as in finding how many harbor bacilli at the moment. Whether this can be done or not remains to be seen.

Esmond R. Long, M. D., Tuberculin Anergy and the Variability of Tuberculins, *Amer. Rev. of Tuberc.*, Vol. XXXIX, No. 4, Apr., 1939.

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W. R. BROOKSHER, M. D., Editor
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EDITORIALS

CANCER EDUCATION

What does the ordinary American know about cancer? How does he regard it? How far has the educational campaign progressed? The American Institute of Public Opinion (Gallup Poll) recently conducted a nation-wide survey among men and women in all walks of life to answer these and related questions, decidedly of interest to medical men as well as the general public. Results of the survey were published during April in over eighty newspapers.

Important facts ascertained in the survey were: 1. Cancer education has progressed to the stage where the majority of Americans know that it can be cured if treated in time. 2. Nevertheless, many Americans still think cancer is incurable, and many others have erroneous ideas on the subject. About one person in five thinks the disease is "catching," and an almost equal number profess not to know whether it is contagious or not. 3. In spite of the progress in

public understanding of the disease, cancer is dreaded far more than other leading causes of death, such as heart disease, pneumonia or tuberculosis.

These findings, perhaps the first effort to evaluate the campaign of the medical profession in lay education, offer encouragement for the ultimate control of cancer, yet indicate that field of public education needs much additional activity.

EDITORIAL COMMENT

THE AMERICAN MEDICAL ASSOCIATION DIRECTORY

During July the American Medical Association distributed cards to all physicians preparatory to the publication of the 16th edition of The Directory of the American Medical Association. Members of the Society are urged to carefully and accurately complete these cards and promptly return to Association headquarters. This is the only way in which members may insure accurate listing in the only authoritative medical directory in the United States.

TESTING THE DRUNKEN DRIVER

The medical profession will be especially interested in a twenty-minute sound film by the above title which presents in an interesting and instructive manner the proper procedure to follow in the use of scientific tests for driver intoxication. Such tests are now available which take the guesswork out of dealing with the highway tippler. It may be shown not only whether the accused driver had been drinking, but whether he had been drunk enough to affect him. The film may be borrowed free from The National Safety Council, 20 North Wacker Drive, Chicago, Illinois, the user to pay only transportation and insurance costs.

"I'M A DOCTOR"

I fit glasses in a jewelry store,
I'm a doctor.
I make speeches by the score,
I'm a doctor.
I preach sermons that folks adore,
I'm a doctor.
I rub vertebrae that are awful sore,
I'm a doctor.
I teach philosophy never heard before,
I'm a doctor.
I treat corns that folks abhor,
I'm a doctor.
But when any illness threatens me
I tell the good wife to call an M.D.
—Exchange.

PROCEEDINGS OF SOCIETIES

The annual Benton-Washington Counties Medical Society picnic was held at Bentonville July 13th with the following program: "Improved Management of Appendicitis," J. K. Donaldson, Little Rock; "Laboratory Findings in Appendicitis," M. J. Kilbury, Little Rock; "Diverticulæ of the Gastrointestinal Tract," F. A. Hughes, Prescott, and "Analysis of the Wagner Bill," A. S. Buchanan, Prescott.

Geo. M. Love, Secretary,
Benton County Medical Society.

The Lawrence County Medical Society met with H. B. Hull at Mammoth Spring June 13th for the following program: "Hormones," E. J. Stroud, Jonesboro, and M. A. Baltz, Pocahontas, and "Tularemia," W. W. Hatcher, Imboden. Luncheon was served by Dr. and Mrs. Hull.

The Lawrence County Medical Society was addressed July 11th by R. H. Willett, Jonesboro, and J. H. McCurry, Cash, on "Cancer." T. C. Guthrie, Secretary.

The Pope-Yell County Medical Society met in dinner session at Saint Mary's Hospital, Russellville, July 13th and was addressed by J. M. Stanford on his recent tour to the west coast and by L. M. Smith, on "Cancer of the Uterus." The Society will next meet at Russellville August 10th for a discussion on "Cancer of the Stomach," led by L. M. Smith.

Roy I. Millard, Secretary.

OBITUARY

THOMAS LEE McDONALD, aged 52, of Hope, died June 26th as the result of an automobile accident at Stephenville, Texas. At the time he was enroute to visit his wife at Granbury, Texas. A graduate of the Memphis Hospital Medical College in 1910, he formerly practiced in Waco, Texas, but had been in Hope for the past 14 years, where he confined himself to the specialty of eye, ear, nose and throat. In addition to his membership in the Hempstead County Medical Society and the Arkansas Medical Society, he was a fellow of the American Medical Association.

PERSONALS AND NEWS ITEMS

Jett Scott, Hot Springs National Park, has been appointed a first lieutenant in the medical corps of the Arkansas National Guard.

Dr. and Mrs. B. A. Bennett, Little Rock, spent a June vacation in New York, Philadelphia and eastern points.

F. J. Scully recently addressed the Hot Springs National Park Rotary Club on the Wagner bill.

"Surgical Dentition: Symptomatology, Diagnosis and Treatments: Its Probable Influence Upon Infant Mortality," by Howell Brewer, M. D., and Lawrence Akers, D. D. S., Hot Springs National Park, appeared in the June Tri-State Medical Journal.

Fred Krock, Fort Smith, spent a July vacation in California.

J. W. Butts has been elected surgeon of the Helena post of the American Legion.

Dr. and Mrs. R. B. Robins, Camden, spent a June vacation at Edgewater Beach, Mississippi.

G. L. Hardgrave and G. R. Siegel have been elected vice-president and director, respectively, of the Clarksville Lions Club.

W. C. Riggins has resigned his position as director of the Ashley County health unit and has accepted a position as resident at Sparks Memorial Hospital, Fort Smith.

"Management of Ureteral Calculi," by H. Fay H. Jones, Little Rock, appeared in the July Southern Medical Journal.

R. M. Eubanks, Little Rock, took special work at the Mayo Clinic during June.

Stanley M. Gates has been elected surgeon of the Monticello post of the American Legion.

Dr. and Mrs. Paul Mahoney, Little Rock, spent a June vacation in Florida.

Dr. and Mrs. M. J. Kilbury, Dr. and Mrs. C. A. Rosenbaum, Little Rock, and Dr. and Mrs. R. B. Robins, Camden, spent a June vacation fishing on the Gulf of Mexico.

L. L. Fatherree, formerly of Jonesboro, has been appointed health officer at Little Rock.

J. T. Altman has been elected a director of the Jonesboro Rotary Club.

B. L. Moore has been elected vice-president of the El Dorado Lions Club.

E. E. Estes has been elected a governor of the Fordyce Country Club.

E. J. Horner has been elected surgeon of the Jonesboro post of the American Legion.

J. B. Jameson presented the new Municipal Building to the city of Camden at the dedicatory exercises.

Ellery C. Gay, Little Rock, has been appointed director of the crippled children's division of the state welfare department.

Dr. and Mrs. L. T. Evans, Batesville, visited the New York World's Fair in June.

Hoyt R. Allen, Little Rock, attended the recent meeting of the American Proctologic Society in New York.

R. L. Smith, Russellville, has been elected a director of the National Compress and Warehouse Company.

M. A. Hardin, Norphlet, attended the New York World's Fair in June.

The State Medical Board of the Arkansas Medical Society has elected the following officers: President, L. T. Evans, Batesville; Vice-president, D. L. Owens, Harrison, and Secretary-treasurer, D. E. White, El Dorado.

Paul Mahoney has been elected a director of the Little Rock Rotary Club.

Dr. and Mrs. H. Moulton, Fort Smith, spent a July vacation in Colorado.

L. H. McDaniel has been elected service officer for the Tyronza post of the American Legion.

D. W. Dykstra has been appointed to head the new division of Syphilis Control of the Arkansas State Board of Health.

S. P. Bond, B. A. Rhinehart, G. W. Reagan, and R. A. Law, Little Rock, spent a July vacation in deep sea fishing off the Mississippi Gulf coast.

J. K. Donaldson, Little Rock, has been appointed chairman of the committee for reduction in appendicitis mortality of the Southern Medical Association.

Drs. Owens and Gladden are constructing an addition to their clinic building at Harrison.

S. P. Bond has been elected president of the Little Rock Kennel Club.

T. J. Cunningham has been joined in practice at Pine Bluff by his son, T. J. Cunningham, Jr.

The Journal is advised that the Arkansas State Board of Health is in need of five physicians under 35 years of age, graduates of Class A medical schools and who have completed a one-year internship. Those interested should communicate with Dr. W. B. Grayson, State Health Officer, Little Rock.

BORN—To Dr. and Mrs. W. J. Schwarz, Lake Village, a daughter, Mary Lynn, on May 8th.

W. A. Grimmett, has been elected surgeon of the Blytheville post of the American Legion.

W. P. Scarlett, Morrilton, spent a July vacation in California.

O. J. T. Johnston, Batesville, recently addressed a homecoming meeting at the Masonic Children's Home in that city.

Dr. and Mrs. Harvey Shipp, Little Rock, spent a July vacation in North Carolina and Virginia.

J. M. Stanford, Russellville, spent a July vacation on the west coast.

The El Dorado post of the American Legion has made the following selections: L. G. Fincher, surgeon, and A. D. Cathey, athletic surgeon.

C. Ray Williams has been elected vice-president of the Booneville Rotary Club.

L. J. Kosminsky, Texarkana, has been elected grand cheminot national of the 40 and 8.

The following attended the annual field encampment of the 153rd Infantry, Arkansas National Guard, at Camp Jos. T. Robinson, in July: Major Howell Brewer, Hot Springs National Park; Capt. Hugh C. Brooke, Conway; Lt. M. B. Bowman and Lt. Jett O. Scott, Hot Springs National Park.

RANDOM THOUGHTS OF THE SECRETARY

June 25th. Arriving at Lake Greenleaf last night, a region of scenic beauty in the Cookson Hills section of Eastern Oklahoma, the beauties of the natural setting enhanced by the efforts of the soil conservation project, we enjoy the remaining hours of daylight, a good dinner, the companionship in the well-filled lobby, the familiarity of the pet monk, and then a most comfortable night's sleep in a rock cabin on the hillside. Arising not too early, we breakfast, and the family goes to the beach while we busy ourselves with some work we have been trying to get out the past week. This away, we visit the beach and top off the morning with a thrilling motor boat ride over the five mile long lake, a trip so enticing to the youngster that it must needs be repeated this afternoon, this time with Peggy as a passenger, who, much less enthusiastic over boating, provides inducement for the driver, at our suggestion, to add a few extra thrills. With memories of a most delightful week-end, we trek homeward in the dusk, promising ourselves encores on this treat. With total disregard of the advice given in a recent health talk one member of the family proves all the points made in that talk and busies herself after reaching home with the application of soothing emollients to a somewhat reddened back.

June 27th. To a gathering of well over two hundred and fifty Farm Security Administration personnel we discuss the program of organized medicine. We cannot but be impressed with the seriousness with which these workers view their program for the rehabilitation of the farm population of Arkansas and wish that organized medicine could summon some of this enthusiasm for its activities. Yet, there are conflicting thoughts. This assemblage represents an annual payroll of well over \$250,000 from the federal government and is a typical example, although not a harsh one, of the ramifications of bureaucracy in administrative phases of any program. Were the United States to adopt some form of state medicine how many times would this payroll be multiplied for administrative purposes only? A final thought: do all these people receive mileage and per diem for attending this meeting?

June 28th. The Auxiliary entertains the doctors in picnic session. Lively conversation and banter, white suits and summer frocks, abundant good food, horse shoe pitching, kelly pool, table tennis, the Louis-"Two Ton" fight, combine to make this occasion in the Goldsteins' delightful garden a festivity for which we seek recurrence. At pool we astonish ourselves by pocketing three balls and winning a jitney. Florence Goldstein, Helen Southard and Ora Rose take us to task over Auxiliary publicity herein, no worthy rebuttal occurring to us. But one phone call received during the party and this column will give that doctor no additional publicity.

July 3rd. For the past two days spending a pre-Fourth vacation at Lake Greenleaf where there is much of pleasure for the family. The final hours are somewhat distressing for us due to certain excess physiological activities incident to the summer season.

July 4th. We spend the quietest possible day, doing nothing all day and enjoying ourselves in this unaccustomed manner.

July 9th. Week-ending at Lake Weddington where we lounge as much as the young hopeful will permit but are routed out to go into the water at least twice daily. Among the water sports is that of sitting down and becoming a submarine observer, a technic we have lost with the years, these old eyes not bearing the strain so well. More or less pleased, however, that we are able to satisfactorily, and without fatigue, swim well over fifty yards, an accomplishment we view with more real pleasure than the day we did a whole mile across one of Pennsylvania's lakes, a dimly recalled feat of 1920.

July 10th. This evening to a weird baseball contest in which the home team garners 30 hits to count 31 runs, there being triples and doubles by the basket, three homers, several stolen bases, a double steal, and that rara avis—a triple play, the second these old eyes have viewed over years of watching baseball.

July 12th. This evening gathering to celebrate in advance the August natal day of Everett Moulton, Mistress M. having prepared chicken and accessories in grand style. The evening devoted principally to a discussion of fishing, and naturally many a long tale is related, but Foster's story of the snake and the frog who essayed to swallow each other undoubtedly entitled to the award. Productive of thoughtful speculation by the scientific minds present is the unusual conduct of the Moulton pet dog, feminine in gender, who, after eight years of sterility, brings forth four young ones, all to the great consternation and permanent disbelief of Juliette who insists that Micky never did such a thing.

July 15th. In and out of Lake Weddington this day, cautious, but not sufficiently so, to avoid actinic rays. Starting the day off by a drive to Fayetteville to see the national guard away to Fort Sill, surprised almost to the point of speechlessness to note gold leaves on Fount Richardson's shoulders. We thought the 142nd had given up this little custom of promotion in advance of federal qualification.

July 18th. An accidental daylight-saving commuter today, having set the alarm for five o'clock rather than six as has been our custom. Thenceforth, the day is most prolonged.

TRY PABLUM ON YOUR VACATION

Vacations are too often a vacation from protective foods. For optimum benefits a vacation should furnish optimum nutrition as well as relaxation, yet actually this is the time when many persons go on a spree of refined carbohydrates. Pablum is a food that "goes good" on camping trips and at the same time supplies an abundance of calcium, phosphorus, iron, and vitamins B and G. It can be prepared in a minute, **without cooking**, as a breakfast dish or used as a flour to increase the mineral and vitamin values of staple recipes. Packed dry, Pablum is light to carry, requires no refrigeration. Easy-to-fix Pablum recipes and samples are available to physicians who request them from Mead Johnson & Company, Evansville, Ind.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

June has been a busy month for the President. Mrs. Kitchens has visited the Ninth District at Harrison, the Clark-Nevada-Hempstead Auxiliary at Prescott, the Washington County Auxiliary at Fayetteville, has conferred with representatives of Benton County at Fayetteville, and with Dr. Krock at Fort Smith regarding cancer control work.

The Tri-County Medical Auxiliary met on June 26th, at the home of Mrs. Paul Hughes, Prescott. Mrs. C. E. Kitchens, State Auxiliary president, was honor guest. The following officers were elected: President, Mrs. O. G. Hirst, Prescott; First Vice-President, Mrs. F. A. Hughes, Prescott; Second Vice-President, Mrs. J. W. Branch, Hope, and Secretary-Treasurer, Mrs. Paul Hughes, Prescott.

At Dermott on April 17th, Drs. Baker, Thompson, and Barlow were hosts to the Southeast Arkansas Medical Society and Auxiliary. A delicious dinner was served to forty-seven guests in the dining room of the Methodist Church by the ladies of the Missionary Society. Two long tables were used, each centered with tastefully arranged flowers of the season. The ladies were invited to the home of Dr. and Mrs. Elwood Baker for the business meeting. After hearing Mrs. Chas. Dixon, of Gould, Councilor for this district, read "What an Auxiliary Member Should Know," Mrs. J. H. Burge, of Lake Village, the president, proceeded with the usual routine, and discussed the possibility of taking up new work, which might be done by a widely scattered membership. The remainder of the evening was spent at games and conversation.

The Washington County Auxiliary held two regular meetings in May. May 2nd being the dinner meeting held at Washington Hotel. Twelve members were present. The second meeting was in the home of one of the members, where they worked on supplies for the City Hospital.

The year 1939-1940 presents another opportunity for the Woman's Auxiliary to the Arkansas Medical Society to serve not only the medical profession, but mankind, in the bringing about of that greatest of human assets—Good Health. The Auxiliary serves through the following channels—health, education, public relations, legislation, philanthropy and social activities.

Our goal is a high one—"every eligible doctor's wife an Auxiliary member." To achieve this goal we must have every county in Arkansas organized. Today, more than ever before the real worth of the Auxiliary is recognized and doctors urge their wives to be members of this group—for through it can be released to the public, the truth about medicine and medical practice. To be able to inform the public the doctor's wife must first possess the necessary information herself. What better way is there to gain this knowledge than in co-operative study with Auxiliary members? As a member of the Auxiliary she will receive greater recognition from and

find more opportunities to serve on program committees of other organizations.

The organization committee for 1939-40 is composed of the following ten district chairmen:

- District 1—Mrs. T. S. Hare, Crawfordville.
 - District 2—Mrs. L. T. Evans, Batesville.
 - District 3—Mrs. W. L. Boswell, Clarendon.
 - District 4—Mrs. C. W. Dixon, Gould.
 - District 5—Mrs. J. B. Jameson, Camden.
 - District 6—Mrs. N. B. Daniel, Texarkana.
 - District 7—Mrs. W. E. Gray, Hot Springs.
 - District 8—Mrs. B. A. Bennett, Little Rock.
 - District 9—Mrs. J. L. Jackson, Harrison.
 - District 10—Mrs. Fred Morrow, Fayetteville.
- Mrs. Alfred Hathcock, President-Elect.

The work of the organization committee is necessarily the groundwork for all other Auxiliary activity so this committee must strive to fulfill its task well and early. It is so necessary that the district chairmen be familiar with the national and state official programs and the constitutions of both the state and national Auxiliaries. Our work is concerned with membership in counties already organized as well as with membership in counties to be organized.

The following tentative plan will be followed preceding the fall Board meeting:

1. Each chairman visit the Auxiliaries in her district before the fall Board meeting.
 - (a). Help them regain lost members.
 - (b). Help them gain new members for every eligible doctor's wife should be an Auxiliary member.
 - (c). Urge that Auxiliary be kept **county-wide** not merely local.
 - (d). Urge that Auxiliary consult its Advisory Board on all activities.
 - (e). Request the appointment of first vice-president as membership chairman in each county Auxiliary.
 - (f). Request program chairmen in each county Auxiliary to reserve one program early in year at which time you will be permitted to conduct a study instructing the members on the aims and purposes of Medical Auxiliary. Doctor's wives from nearly unorganized counties should be invited to attend this meeting.
2. Study your district. List counties which have had an Auxiliary but where one no longer exists; also counties which have never been organized. Secure interest of individuals in those counties to promote organization.
3. Where organization is impossible because of lack of numbers urge that adjacent Auxiliary invite eligible doctor's wives to join its group; if she cannot attend all meetings, she will appreciate belonging to a county Auxiliary rather than being merely a member of "state-at-large."
4. Make plans immediately for regular district meetings. Information regarding dates and places of

meetings can be secured from District Councillors or secretaries of Medical Societies.

5. Bring an eligible doctor's wife from each county in your district to the Board Meeting this Fall. This is our president, Mrs. Kitchen's, suggestion and a good one to stimulate interest where organization is not yet accomplished.
6. District Chairmen will please bring to the Fall Board Meeting a report of what they have done to date and complete plans for organization work in their district.

The successful organization committee is the one which works in close co-operation with the other officers and chairmen and which looks upon membership not as an end in itself but an instrument for promoting the objects of the Auxiliary. Let us accomplish success by aiming at what we should achieve and not in just achieving what we aim at.

Mrs. Loyce Hathcock,
Chairman of Organization,
Fayetteville, Arkansas.

Physicians and their wives and medical students and guests made up a party of 43 Wednesday night when the Auxiliary of the Sebastian County Medical Society entertained at the home of Dr. and Mrs. D. W. Goldstein, Rogers Avenue.

A picnic supper was served in the garden. Afterwards an informal program of games in the recreation room entertained the guests.

Mrs. D. W. Goldstein, Mrs. A. A. Blair, Mrs. W. R. Brooksher, Jr., Mrs. I. Fulton Jones and Mrs. Walter G. Eberle comprised the committee on arrangements. Mrs. Brooksher was chairman.

In addition to the host and hostess, Dr. and Mrs. Goldstein, the guests were: Dr. and Mrs. A. A. Blair, Dr. and Mrs. W. R. Brooksher, Dr. and Mrs. Walter G. Eberle, Dr. and Mrs. J. S. Southard, Dr. and Mrs. Charles T. Chamberlain, Dr. and Mrs. M. E. Foster, Dr. and Mrs. Raymond Smith, Dr. and Mrs. Everett Moulton, Dr. and Mrs. A. F. Hoge, Dr. and Mrs. W. F. Adams, Dr. and Mrs. I. Fulton Jones, Dr. and Mrs. T. P. Foltz, Dr. and Mrs. S. J. Wolfermann, Mrs. W. F. Rose, Mrs. Harry B. Fink, Miss Dorothy Ann Blair, Dr. J. W. Amis, Dr. C. E. Benefield, Dr. J. H. Benefield, Dr. Horace Dozier, Dr. and Mrs. S. P. Stubbs, Dr. H. H. Smith.

Medical students who were guests were: June Melton, Everett Moulton, Jr., and Marlin Hoge.

Out-ow-town guests were: Dr. and Mrs. B. L. Ware of Greenwood.

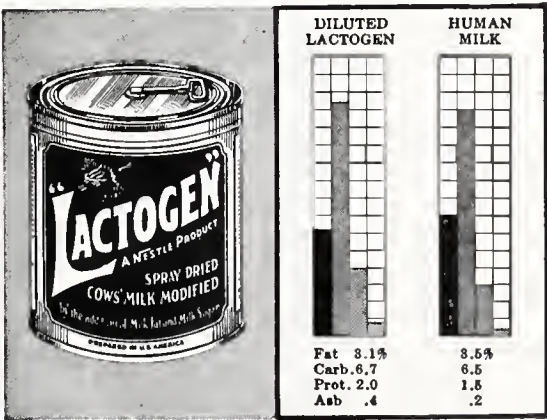
Mrs. W. F. Rose,
Publicity Secretary.

Mrs. Warren Riley, El Dorado, is Chairman of the Legislative Committee of the Auxiliary instead of Mrs. Wm. Hibbitts, as published in the July issue of The Journal. Mrs. Hibbitts, as Past-president, is a Councillor.

(Mrs. C. E.) Bess Kitchens,
President.

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BOOK REVIEWS

Endocrinology in Modern Practice: By William Wolf, M. D., M. S., Ph. D., Endocrinologist to the French Hospital, Attending Endocrinologist, Misericordia Hospital, New York City; Consulting Endocrinologist, New York University Dental School. Second Edition, Completely Revised. 1077 pages with 176 illustrations. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$10.00 net.

Endocrinology, the youngest branch of medical science is undoubtedly still in its infancy or, perhaps by being optimistic, it could be considered in the pre-adolescent stage. This being the stage of rapid growth and development, of necessity, any book written upon this subject at this stage would require frequent revision. The second edition of Wolf's "Endocrinology in Modern Practice" is a decided improvement over the previous edition in that it contains a digest of the latest laboratory work in this field, together with clinical advances both in diagnosis and in treatment.

The general plan of both editions of the book is excellent. The outstanding features are its readability, logical arrangement of subjects and boxed chapter summaries. Chapter XXX, on symptom diagnosis, is a most valuable aid to the busy practitioner, giving instant leads and references. Chapter XXXII, which lists the principal endocrine preparations, their description, dosage and manufacturers, is a pleasing innovation and a welcome time saver.

The only valid adverse criticism of the book would be its paucity of illustrations. It is a practical and valuable book for the general practitioner and a handy aid for the specialist.

Organized Payments for Medical Services: By the Bureau of Medical Economics, American Medical Association. Paper. Pp. 185. Chicago: American Medical Association, 1939.

It would stretch the imagination of a social planner to devise any scheme for the organized payment for medical services that is not described in this publication of the Bureau of Medical Economics of the American Medical Association on "Organized Payments for Medical Services." Several hundred plans for medical care of the indigent involving governmental support and medical society management are explained. Social Security legislation has brought about changes in medical arrangements reaching into almost every locality in the United States and affecting health departments, medical societies, and state and local governments. Types of plans proposed by the Farm Security Administration to provide medical services to Administration clients in 127 counties and covering 100,000 low income families are described. Medical societies have organized postpayment and prepayment plans of medical care offering a wide selection of types. Some provide for a cash indemnity to be paid to the insured with which he can purchase his own medical service and others provide medical service directly.

Industries, unions, fraternal organizations, and all sorts of mutual societies provide medical benefits for their members by a variety of prepayment devices. Some 3,000,000 persons are covered by group hospitalization plans, which show a wide variety of relations with state and county medical societies. Commercial insurance companies, all of whom pay benefits in cash, are also entering this field on a large scale. It is estimated that

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approximately \$300,000,000 in cash is paid out annually by insurance companies to assist in paying medical bills.

The House of Delegates of the American Medical Association has endorsed cash indemnity prepayment plans, but has not sought to prohibit any of its component societies from cooperating with or organizing other types of prepayment for medical service provided their character is not such as to render it impossible to give good medical service.

The number and variety of the plans for medical services—operating and proposed, postpayment and prepayment, service and cash, medical society and other organization sponsored—give proof of the efforts that are being made to supplement the private practice of medicine and indicate a desire to discover, by social experimentation, a solution of local medical problems.

The Patient as a Person: By G. Canby Robinson, M. D., LL. D., Sc. D., Lecturer in Medicine, Johns Hopkins University. Pp. 440. Price \$3.00. New York: The Commonwealth Fund, 1939.

A doctor connected for the great majority of his medical career with the clinics of the medical schools in the larger cities, makes the astounding discovery that the emotional, mental and family background of the patient, has a marked influence on the patient's disease process.

This fact has been known and coped with for generations by those of us that practice in the smaller communities.

The volume will be of no help to any but those doctors that are a part of the large school clinics. It may be a new thought to them that "The patient is a person."

As I see it, this volume presents a graphic picture and commentary on the average patient in any doctor's hands, once we have state medicine. Years from now, when state medicine has been in effect for some time, this work may excite more favorable comment.

Short Stature and Height Increase: By C. J. Gerling. Pp. 159. Price \$3.00. New York: Harvest House, 1939.

In a rather light vein this book extolls the desirability of being tall while deploring the disadvantages of being short. The short of stature are urged to be busy doing something about it, to finally reach the inescapable conclusion, already suspected, that there is little to do, deceptive measures excepted.

A Textbook of Obstetrics: By Charles B. Reed, M. D., F. A. C. S., Associate Professor of Obstetrics, Northwestern University Medical School; Head of Obstetrical Department, Wesley Memorial Hospital, Chicago, and Bess I. Cooley, R. N., Supervisor and Instructor, Department of Obstetrics, Wesley Memorial Hospital, Chicago. Pp. 479. 209 illustrations. Price \$3.00. Saint Louis: C. V. Mosby Company, 1939.

This text has been simply and concisely written for the student nurse. It is well illustrated and covers the field of nursing procedure both in the home and hospital with an excellent selection of practical nursing procedures to meet the general requirements of the obstetrical nurse. While it devotes no space to detail, this book should be very satisfactory as a text for basic training.

A picture booklet on basic facts about tuberculosis has just been issued by the National Tuberculosis Association and is available through state and local tuberculosis associations.

Publication of the booklet was prompted by the success of Isotype charts, which are being used throughout the country by tuberculosis and health associations. The booklet contains material from the Isotype charts, redesigned for the printed page.

The first five pages describe contacts and the spread of tuberculosis germs. Among the other phases of tuberculosis presented are symptoms, diagnosis, treatment, case-finding, and incidence.



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No. 4

THE RELATIONSHIP BETWEEN HEART DISEASE AND CHRONIC PULMONARY AFFECTIONS *

CHARLES T. CHAMBERLAIN, M. D.

Undoubtedly no two systems in the human body possess a greater functional interdependence than do those of circulation and respiration. The adequacy of the one determines the sufficiency of the other, and vice versa. Embarrassment of the one inevitably results in derangement of the other regardless of whether the damaging factors be mechanical, bacterial or allergic. Clinically this is well illustrated in the case of pneumonia, an acute inflammatory disease involving the lungs, where the status of the circulation determines in large part the prognosis of the pulmonary affection.

It naturally follows, therefore, that the clinical manifestations of disordered respiratory function are frequently so similar to, if not identical with, those arising from disturbances in the heart and peripheral circulation. Breathlessness, or dyspnea, cough and cyanosis, are cardinal symptoms referable to both.

We, as clinicians, are fully aware of this common inheritance in the acute affections of the respiratory and circulatory systems such as pneumonia on the one hand, and massive pulmonary edema of acute heart failure on the other hand. But when one considers chronic pulmonary diseases such as chronic bronchitis, asthma, asthmatic bronchitis, obstructive emphysema, bronchiectasis, pneumoconiosis and pulmonary fibrosis, there is some tendency toward confusion, if not to an attitude of complacency, concerning these conditions in their incipency, or early stages. For example, how many of us dismiss the patient with chronic bronchitis with more than a prescription for a cough sedative, a pat on the back, and a selfishly satisfying reflection that he will consult us or some other doctor next winter with

the same distressing symptoms? How much thought do we give the chronic asthmatic between attacks? How seriously do we meditate upon the question of the persistent cough that follows the subsidence of acute pneumonia?

It is not my purpose to elaborate on chronic pulmonary disease but I do propose to discuss with you briefly the pathogenesis, or pathological physiology, of the production of heart failure that is secondary to long-standing disease of the lung, and bronchi, not because this particular type of heart disease is distinctive or set apart from cardiac insufficiency due to other causes, but because I desire to stimulate in you a more active interest in the significance of chronic pulmonary diseases.

Tuberculosis has been purposely eliminated except in so far as it is a factor in the production of, or associated with emphysema, asthma, and bronchiectasis, and at this point tuberculosis tracheo-bronchitis deserves special mention. If I have been able to help you in interpreting more intelligently the symptoms that arise from pulmonary insufficiency as distinguished from those that are the result of cardiac insufficiency, by so stimulating your interest, then I shall feel that my purpose has been accomplished, because as a natural result thereof, our treatment of these disorders shall be more accurate and more effective.

Anatomy and Physiology:

The oxygenating apparatus of the animal organism consists of an alveolocapillary wall set in between two distributing systems; on one side is the air with its life-sustaining oxygen, the necessary airways and respiratory pump of the suction type, and on the other is the blood with the oxygen-carrier hemoglobin, a distributing system of blood-vessels and the circulatory force pump, the heart. If one considers only the steps in the process of oxygenation, it will be noted that the respiratory system has but one responsibility—namely, that of delivering to the necessary respiratory surface area oxygen

* Read before the Sixty-fourth Annual Session, Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

in sufficient quantity and at an adequate pressure to meet the demands of the organism. The circulatory pump, however, has two responsibilities. It must deliver to the opposite side of the alveolocapillary wall hemoglobin for the loading of oxygen, and then it must transport that oxygen and discharge it at the proper unloading stations throughout the body. Oxygenation is completed by the delivery of active oxygen to the cell. Anoxemia may be the result of a defect at any point in this apparatus from the atmospheric reservoir of oxygen to the final unloading station at the level of the cell. At one extreme stands the defect causing mountain sickness, at the other extreme, that derangement at the basis of cyanid poisoning; in between are the various pulmonary and arterial conditions in which acute or chronic anoxemia of greater or less severity may be found.

The subatmospheric pressure in the chest not only keeps the pulmonary peripheral pressure low (the pressure in the pulmonary artery is only 20 mm. Hg), but assists the respiratory and circulatory functions of absorption, transportation and elimination of gases by its expansile effect upon the vascular bed and by its aspirating effect upon the blood. The anatomic evidences of this low pulmonary peripheral resistance are found on the one hand in the relatively small amount of muscle tissue normally present in the walls of the pulmonary arterioles, and on the other hand in the thinness of the right ventricular wall, normally 3 to 4 mm., as compared with a thickness of 12.5 mm. for the left ventricle, which works against a much higher peripheral resistance.

The primary effect of obstruction in the lesser circulation is to increase the blood pressure in the pulmonary artery; secondary effects are to produce anatomic changes in the pulmonary artery (arteriosclerosis) and in the right ventricle (hypertrophy). Secondary vascular changes may add to the obstructive effects of the primary lesion. The effect upon respiratory function is dependent upon the location, magnitude and tempo of the obstruction.

Since the only communication between the bronchial artery and the pulmonary arterial system is by way of the pulmonary capillaries, and not by way of vascular connections of respectable size, it is very unlikely that a collateral circulation in the lungs can be developed through the bronchial artery to compensate for obstruction in the main branches of the pulmonary artery, at least so far as respiratory

function is concerned. Moreover, since the bronchial artery carries arterial blood, it is a little difficult to see what assistance in the business of oxygenation such a circulation could furnish. In the absence of an adequate collateral circulation a reduction in the capillary bed must necessarily be accompanied by a reduction in effective respiratory surface area. It is felt, therefore, that whether obstruction be in the main branches of the pulmonary artery or in the arterioles, anoxemia is due in great measure to inadequate re-oxygenation in the lungs.

Usually two forms of pulmonary arteriosclerosis are described: (1) primary, and (2), secondary. The primary form is rare, of obscure etiology, and affects chiefly the small arteries, arterioles and capillaries. The larger vessels may be or may not be involved. It has been called arteriolocapillary fibrosis of the lung and compared to the similar condition in the kidney.

Moschcowitz, who related all pulmonary arteriosclerosis to increased pulmonary arterial pressure and doubts the existence of primary form, says: "The resemblance between lesions of the pulmonary capillaries in hypertension of the lesser circulation and those of the glomerular capillaries in essential hypertension is striking, and in almost every respect they are identical." It produces a narrowing, even obliteration of the small vessels of the lung, which results, on the one hand, in serious interference with respiratory function and on the other, in adding to the burden of the right heart by increasing pulmonary arterial pressure. Our interest is not so much in the etiology of the condition as in its effects upon respiratory function.

The secondary form is more common, involves the larger arteries, and is apparently ascribable to the increase in pulmonary arterial pressure from down-stream changes in the heart and lung (mitral stenosis, emphysema, pneumoconiosis). It may be associated with a generalized arteriosclerosis. As Pund and Phinzy put it, these changes are usually without clinical significance or are overshadowed by symptoms produced by the primary disorder.

Moschcowitz says that the difference between arteriosclerosis of the pulmonary circulation and that of the major system is solely one of intensity of the process. He thinks alveolar capillary lesions are pathognomonic of hypertension of the lesser circulation and its conse-

quent arteriosclerosis, and that the thickening and hyalinization of the alveolar capillary wall embarrasses gas exchange and produces anoxemia. Increase of pericapillary connective tissue, which may reach the proportions of a true interstitial infiltration, is the result of a progressive interference with the blood supply.

Thus far we have considered those forms of obstruction in the lesser circulation in which the location of the obstruction is more or less distant from the capillary bed. In these instances the capillary bed is affected indirectly since the pulmonary arterial current is blocked higher up. The capillary bed may also be reduced by diffuse lesions which involve it primarily. These lesions, if they are sufficiently extensive and slowly progressive, may likewise by their mechanical obstructive action produce right ventricular hypertrophy and by direct obliterating effect upon the capillaries interfere with oxygenation. The clinical expression of all this will again be the syndrome of cyanosis, dyspnea and right ventricular hypertrophy with the possible addition of polycythemia, according to some authorities, provided constitutionally depressing influences, such as those which are usually associated with infectious processes, do not interfere with blood formation. Representative of these conditions are extensive pulmonary fibroses and the pathologic processes found in severe long continued chronic bronchitis, asthma and emphysema. Yegge recently reported a case of this latter type in which the effects of obstruction in the capillary bed were greatly exaggerated by hard work and the low oxygen tension of high altitude. This patient, a lumberjack, long a sufferer from bronchial asthma, who had worked for many years at 10,000 feet altitude, showed the clinical complex of intense cyanosis, dyspnea, polycythemia (maximum red cell count, 8,350,000), somnolence and right ventricular hypertrophy. At the post-mortem examination the right ventricular wall measured 14 mm., the heart valves were normal, and the pulmonary artery and all its branches were greatly dilated. The lungs showed marked emphysema, much fibrosis, and the typical picture associated with bronchial asthma, namely, thickening and hyalinization of the basement membrane of the bronchi, hypertrophy of the smooth muscle in the bronchial walls, and infiltration of the bronchial walls with lymphocytes and eosinophils. The bone marrow showed moderate hyperplasia. The clinical diagnosis in this case was failure of acclimatization because of hard work at a high altitude, secondary poly-

cythemia, cardiac decompensation, emphysema and bronchial asthma, terminal bronchopneumonia.

The fundamental disturbances in chronic pulmonary disease are therefore twofold in nature. One is the altered property of the alveolar walls which interferes with adequate aeration of blood in its passage through the lungs and gives rise to anoxemia. The other is the mechanical reduction in the patency of the pulmonary vascular bed. This latter condition heightens the pulmonary peripheral resistance and leads to a circulatory condition known as hypertension of the pulmonary circuit, which has been popularized by the writings of Moschowitz. Both of these factors, namely the anoxemia and the pulmonary peripheral resistance, probably play important roles in the genesis of failure of the right heart in chronic pulmonary disease. Although there is considerable experimental evidence which indicates that the right heart, under ordinary conditions, possesses a large physiological factor of safety, yet instances of isolated failure of the right heart in chronic lung disorders are not infrequently observed.

In summary then, the factors that operate in chronic pulmonary disease to cause fatigue and failure of the right ventricle are as follows: The right ventricle performs work in transporting blood through the pulmonary channels to the left side of the heart. The amount of work performed by the right ventricle is determined by the volume of blood it has to propel (venous return) and the pulmonary resistance against which its venous load is ejected. In the majority of instances of emphysema, the pulmonary vascular resistance becomes augmented, and the work done by the right ventricular chamber is consequently proportionately increased. As a consequence, even in the early stages of chronic pulmonary disease, the heart may hypertrophy (and even dilate) as a physiological response to increased work. This "work-hypertrophy" of the right heart, designated in the literature as *cor pulmonale*, enables it to cope adequately with the increased work which confronts it. The circulation through the lungs is thereby maintained at a normal or fast normal speed, and the organism suffers solely from the affects of the primary pulmonary disease and the associated anoxemia.

Although sudden drastic reduction in the patency of the pulmonary vascular bed may occur clinically, as for example, in massive pulmonary embolization, and give rise to rapid

fatigue and progressive failure of the right ventricle, this condition does not appear to be identical with the circulatory derangement that follows long standing chronic pulmonary disease. In the latter condition right heart failure is probably a gradual summation effect of (a) mechanical overwork and (b) quantitative and qualitative alteration of coronary blood flow. As has been previously pointed out, the long-standing progressively increasing pulmonary resistance leads to a work-hypertrophy of the right ventricle. To maintain its nutrition this progressively enlarging myocardial mass requires a corresponding increase in its blood supply. The coronary circulation is relatively insufficient, quantitatively, because of the unchanging and later even diminishing aortic pressures, and qualitatively, because of the anoxemia. These factors lead to relative ischemia or anoxemia of the hypertrophying right ventricular myocardium, which in the presence of continued overwork of the right ventricle must eventually lead to its nutritional impairment and to consequent diminution of its functional capacity.

Even though he may be aware of the factors operating to produce pulmonary and later cardiac insufficiency as outlined above, the practitioner when confronted with an individual who has an emphysematous chest, cough, and dyspnea, is frequently confused in his attempt to determine whether these signs and symptoms are secondary to uncomplicated lung or bronchial disturbances, cardiac insufficiency, or to both in combination. Yet it is generally conceded that it is most important that this differentiation be made, a differentiation that is almost as difficult as it is essential, from the standpoint of prevention, treatment, and prognosis.

While it may be true that cor pulmonale or pulmonary heart disease secondary to affections of the lungs and bronchi is relatively rare, it undoubtedly has been a neglected subject and is probably more common than most statistical studies have indicated.

An interesting bit of evidence in support of this statement is to be found in the report of Coggin et al. in regard to the incidence of heart disease in pneumoconiosis. These authors reviewed autopsy protocols of 102 cases of pneumoconiosis occurring in nearly 20,000 autopsies together with clinical records of 103 additional cases in which there were adequate histories of exposure to silica and characteristic roetgenographic changes. This survey was done

chiefly to determine the incidence of pulmonary heart disease and congestive heart failure in pneumoconiosis. Right ventricular hypertrophy was found to occur in approximately half of the cases of pneumoconiosis. Including hypertrophy of both ventricles, right ventricular hypertrophy occurred in 59 per cent of the cases. Interestingly enough definite heart failure was found more frequently in their series (51%) than was tuberculosis (40%). Congestive heart failure was usually a terminal event. Therefore when it occurs clinically the prognosis is grave. On the basis of their findings these authors further conclude that:

1. If pneumoconiosis is uncomplicated by tuberculosis or other pulmonary infections death from cardiac failure is to be expected.

2. That the clinical diagnosis of cor pulmonale is pneumoconiosis, or any other chronic, pulmonary disease for that matter, is suggested by (a) accentuation of the pulmonic second sound, (b) marked cyanosis, (c) right axis deviation in the electrocardiogram, and (d), characteristic changes in the posteroanterior radiograph, namely, prominence of the pulmonary conus, elevation of the cardiac apex, and an increase of the broad or basal diameter in the absence of enlargement of the other diameter.

It certainly behooves us, therefore, to bear in mind that breathlessness, cough, and cyanosis are outstanding symptoms of both cardiac and pulmonary conditions. Prognosis as well as treatment depends heavily upon an intelligent differentiation of the underlying causative factors. For example, dyspnea due to asthma or asthmatic bronchitis while it is distressing, is intermittent and also compatible with a long and useful life. On the other hand, dyspnea due to acute heart failure is typically paroxysmal or asthmatic in its manifestations and is necessarily grave in its prognostic import. Furthermore, digitalis is helpful in the management of cardiac dyspnea but utterly useless for the wheezing of the allergic asthmatic. Similarly adrenalin, ephedrine and potassium iodide are almost indispensable in the asthmatic states but become not only worthless but sometimes even harmful when administered for the dyspnea of cardiac failure.

While at this time it has not been appropriate to undertake any detailed discussion of the clinical aspects of this problem I feel that successful management necessarily requires familiarity with the physiological and pathologico-physiological concepts herein described.

1425 North Eleventh Street.

THE PRESENT STATUS OF ANTIPNEUMOCOCCUS SERUM AND SULFAPYRIDINE IN THE "MANAGEMENT OF THE PNEUMONIAS"

F. E. SCHMIDT, M. D.
Chicago

Research and clinical evidence indicates that a valuable chemo-therapeutic agent has been added to our armamentarium in the treatment of pneumococcus pneumonias. A compound, named sulfapyridine, formed by displacing one H atom from the sulfanilamide radical with a basic pyridine group, has been placed on the market after considerable investigation and proof of its value in pneumococcus infections. This chemical is known also as M & B 693, or daganan.

In evaluating any therapeutic agency we must keep many factors constantly in mind. Thus in pneumonias, we must keep before us the effect of the product on the clinical course of the disease, and under varying conditions, such as age, alcoholism, bacteremias, type of infection, rate of absorption, toxic manifestations, and extent of involvement, as well as many others.

The value of type-specific antipneumococcus serum has been definitely established and it would be unfortunate indeed should we neglect the benefits thereof until any new therapy was equally well proven.

There is hardly any doubt that sulfapyridine has a definite bacteriostatic effect on the pneumococcus. Sulfapyridine, however, is not of any greater value in streptococcus, meningococcus, and some other infections than sulfanilamide, so we must continue to make a definite bacteriological diagnosis—we must at least know for the present that we have a pneumococcus infection before we use sulfapyridine, because of toxic manifestations already revealed and the greater difficulty in administration. While this etiology is being determined it is little less difficult in most cases, to determine also the type of pneumococcus which is necessary in specific serum treatment. In fact typing helps to establish the pneumococcus as the cause.

In all events it appears that phagocytosis is necessary to destroy the pneumococcus—antibody is required to attenuate the protective capsule of the organism before the leukocytes can destroy the pneumococcus.

It may be significant that sulfapyridine does not interfere with typing, although early literature claimed it did, and that the capsule of the

pneumococcus must be sensitized or attenuated for phagocytosis: this would impress the necessity of antibody.

There are two possible methods of attacking the problem—we can limit the multiplication of the pneumococcus until the normal immunological processes can function, or we can supply artificially the necessary antibody and so hasten recovery.

In pneumonia time is a big element—we have an emergency. The time or duration of the disease is no less important than the actual saving of life, for this reason, it is for the present at least, the consensus of opinion, that every established means be used to that purpose; i. e. both serum and sulfapyridine should be used and **both early** as well as usual symptomatic supportive treatment and careful nursing.

The doctor must determine his course of procedure in the various cases as they present themselves. In some such sulfapyridine may suffice—or again as in children, who do well as a rule, where the mortality rate is very low—or again in otherwise healthy young individuals with a minimum of lung involvement, of higher types, considered less virulent—where bacteremia is absent. Then there is a percentage where specific typing is not accomplished or where the causative organism cannot be found in the sputum.

Under these and other such conditions sulfapyridine is justified and coincident in such cases the patients have improved. We must remember, however, that many pneumonias recover regardless of treatment and that it is too soon to draw final conclusions in the use of the drug alone.

We must keep in mind certain toxic manifestations in using sulfapyridine—nausea and vomiting which occur quite frequently, headache, anorexia, weakness, depressed feeling, mental confusion, cyanosis, jaundice, acute hemolytic anemia, leukopenia, agranulocytosis, drug-fever and dermatitis.

All investigators have found sulfapyridine no less toxic than sulfanilamide. When the above toxic conditions persist the drug must be stopped, and the serum may be too late.

Sulfapyridine is more difficult to administer than sulfanilamide because of the vomiting, its poor solubility and irregularity in absorption. Possibly a newer more soluble sodium salt now being investigated may overcome this difficulty, but parenteral use is not advisable at present.

Now as to dosage of sulfapyridine—for the present 2 grams are given by mouth and repeated in 4 hours, followed by 1 gram every 4 hours. The blood level should be watched to maintain it at 3 to 6 mgs per cent as determined by the Marshall test, using sulfapyridine as control. The drug must be continued for at least 48 hours after temperature is normal.

One of the outstanding features of adequate serum treatment is that as a rule the temperature drops to normal within a few hours and that the patient feels considerably improved as the temperature approaches normal. The temperature does not so consistently nor rapidly drop with the use of the drug and the patient does not always appear nor feel so well, and the drug leaves in some cases the same period of suspense and anxiety avoided with early adequate serum. So for the present **both** serum and drug are recommended and **both** early.

There are indications that:

The combined use of both drug and serum therapy will reduce mortality further than either alone: The period of illness is shortened and complications are reduced: and it is indicated that less serum is required when both are employed **early**, although definite serum dosage requirements under this method have not as yet been established. Prolonged use of the drug is largely avoided thus lessening toxic manifestation.

The consensus of the opinions of leading pneumonia clinicians advises the use of serum immediately in drug treated cases:

- if the patients temperature, pulse and respiration do not respond to the drug by dropping to essentially normal in 24 hours.
- if the case is of 3 days or more duration.
- if bacteremia is present.
- if patient is over 40.
- if 2 or more lobes are involved.
- if patient is pregnant or in first week of puerperium, or
- if patient cannot tolerate sulfapyridine or toxic manifestations therefore appear.

Remember hesitant methods do not save patients, therefore, again: Combined serum and sulfapyridine and **both** early.

Precautions in Use of Sulfapyridine

1. Liver dysfunction or impairment, cirrhosis, degeneration.
2. Kidney impairment, nephritis, etc.
3. Anemias, leucopenias.
4. Acidosis.
5. Avoid sulphates and sulphides.

CORRESPONDENCE

July 18, 1939.

Dear Dr. Brooksher:

I appreciate your letter of July 12, and I hope that my efforts were bent in the right direction and that they will help you in improving your maternal welfare.

My trip to Arkansas and over it was very enjoyable and pleasant. I took about 350 feet of sixteen millimeter colored movie film of your industries and scenery of your state.

I would like to express to you and the members of your society my appreciation for the willingness of everyone to be of assistance. I shall long remember the very cordial reception I was given in every community.

I extend to you my best wishes for the success of you and your colleagues in the movement, and my very best wishes to you personally.

Sincerely yours,

H. CLOSE HESSELTINE.

COMING MEDICAL MEETINGS

Fifth Councilor District Medical Society, Camden, October 5th.

First Councilor District Medical Society, Paragould, October 17th.

Oklahoma City Clinical Society, Oklahoma City, October 30th—November 2nd.

Southern Medical Association, Memphis, November 21-24th.

RECOVERY FROM TUBERCULOSIS

Much has been said and written of late years as to the relative value of the early diagnosis of pulmonary tuberculosis, but it is no less important to be sure by reliable test that the disease is arrested. Temperature, pulse-rate, blood sedimentation and X-rays should all be utilized in coming to a decision and after there is no further progression, time should be given for the healing of the existing pathological process. Only then can the patient be assured that recovery has taken place and that recurrence is unlikely under the ordinary stresses of life. Green, J. W., Med. Bull. Vet. Adm., Jan., 1936.

ELECTROCARDIOGRAPHY *

S. A. THOMPSON, M. D.
Camden

The term electrocardiography as appears on the program is very broad and this paper will attempt to give only a general idea of:

(1) The History, (2) The Mechanics of the Tracing (3) Its Usefulness as Diagnostic Aid, and (4) Its Limitations. The first instrument was a string machine described by Einthoven of Leyden in 1903. He published his studies with this machine in 1906-1908. In 1910 the first machines were installed in this country in some of our eastern centers.

The string, in this type of machine, is of very fine spun platinum, plated with silver or gold. It is anchored between two poles, and when all connections are made, vibrates with each movement of the heart. The beam machine is a very much later development. It uses a ray of light instead of a string which also vibrates with each heart movement. These vibrations are recorded on the film in the camera which each machine carries. This film is developed similar to X-ray films and you have your tracings. Both machines do excellent work. There are four standard leads:

R. A. — L. A. — I; R. A. — L. L. — II; L. A. — L. L. — III; and Lead — IV.

Fourth inter space at the left edge of the sternum and the space at the angle of the scapula and spine. The apex is also used for the front electrode by some, but is so designated when used.

The tracing is studied and recorded, the vertical lines representing time (one twenty-fifth of a second), while the horizontal lines represent distance (one millimeter). The position of patient, rate, rhythm and axis are noted, as is height, direction, time and appearance of P Wave, P R interval, Q R S, T Wave and S T interval. The relationship of each phase of each tracing with the other is also recorded. The evaluation of the significance of these notes is then made. Care must be taken to exclude the effects of digitalis, quinidine or morphine. When patients have had any of the above drugs the cardiologist should be so advised.

All of us should have a general knowledge of the electrocardiograph as a diagnostic aid. It is gradually taking its place, where indicated,

with other procedures such as blood chemistry and microscopy; detailed urinalyses, metabolism determinations and X-ray studies. This machine does, in some cases, give you a correct diagnosis or eliminate your suspicions. With this aid some conditions may now be recognized and intelligently managed, where there was but a faint suspicion of the diagnosis in the minds of our best clinicians less than a generation ago.

Your electrocardiograph report may tell you that you have arrhythmia, auricular flutter or fibrillation, heart block, bundle branch block, coronary T wave or coronary thrombosis. This report will probably conclude as follows: "There is, or is not, definite evidence of myocardial disease at this time." You must determine the cause and plot the course of management.

You must not expect the electrocardiograph to make a complete cardiac diagnosis. It is only one of the factors upon which you should base your opinion. Mechanical aids will never do away with careful clinical study, physical examination and a searching history.

You must not expect a negative finding today to remain true tomorrow. It is possible for your patient to have an angina pectoris with a normal tracing today and tomorrow he may have a coronary thrombosis.

Summary

1. Electrocardiography is not new.
2. It is a valuable aid in diagnosis and management of heart disease.
3. It does not make a complete cardiac diagnosis.
4. It does not replace history, physical examination and clinical study.

OBITUARY

GEORGE THOMAS LAMAN, age 60, died at his home in Cave City August 8th. Educated in the public schools of Sharp County, he attended medical school in Saint Louis and was licensed to practice in 1904. In 1905 he married Miss Pearl Allison, of Alicia, who, with a daughter, survives him. A member of the Independence County Medical Society, the Arkansas Medical Society, the American Medical Association, he was also a member of the Masonic lodge and of the Methodist church. He had been a member of the Cave City School Board for several years.

* Read before the Sixty-fourth Annual Session, Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

RESOLUTIONS

DR. J. W. FELTS

Whereas, Divine Providence has removed from our midst, a fellow member of the Lawrence County Medical Society, and

Whereas, while he was a quiet, unobtrusive in his contact with the Society, yet he was steady, and stood for the better things in organized medicine, and,

Whereas, we realize that in his death our Society lost a loyal member, Therefore be it resolved by the Lawrence County Medical Society, that we deeply deplore his untimely going; but will remember, with pleasure his presence in our meetings; and,

Be it further resolved that we spread these resolutions upon our minutes for a permanent record, and that we present a copy to the bereaved family, and furnish a copy for publication in the local newspaper.

Respectfully submitted,

CHAS. D. TIBBELS,
Chairman of Committee.

DR. WM. JOHNSTON

Whereas, Divine Providence has removed from our midst our beloved brother, Dr. Wm. Johnston, and

Whereas, he was for many years a faithful member of our Lawrence County Medical Society, and

Whereas, whether as president, Delegate to the State Society, or as a member of the body, he was always strong for a greater and better Society, and

Whereas, we realize that in his town, his church or his home, he was just as honorable, just as worthy as in our medical society, and

Whereas, we realize that one has fallen from our ranks, whose place will be hard to fill.

Therefore be it resolved by the Lawrence County Medical Society that, while we bow in meek submission to Him who doeth all things well, yet, in our innermost being we weep that it had to be at this time. At this time when organized medicine so badly needs just such strong brave men as he to stand in the forefront; and

Be it further resolved that in his going we realize that organized medicine has lost one of its strongest supporters; Lawrence County Med-

ical Society has lost one of its most able members; the community one of its leading citizens, and the family has lost a loving companion and an indulgent father.

Be it further resolved that a copy of these resolutions be presented to the bereaved family; a copy furnished the local papers for publication, and a copy spread on our minutes to be a permanent record.

Respectfully submitted,

CHAS. D. TIBBELS,
Chairman of Committee.

Adopted by the Pulaski County Medical Society on the death of Dr. Alvin Leonidas Jobe which occurred in Little Rock, Arkansas, May 26, 1939.

Dr. Jobe was born at Lewisburg, Tennessee, October 6, 1880. He moved to Hempstead County, Arkansas, in 1902; he taught school and was County Examiner for Hempstead County, Arkansas, for several years. He moved to Little Rock, Arkansas, and began the study of medicine, graduating from the University of Arkansas, Medical Department, in 1914. He began the practice of medicine in Little Rock.

In 1917 when the United States entered the World War, Dr. Jobe was above draft age, however he volunteered his service in the Medical Corps and was assigned to Hospital Unit "T" and was a powerful factor in assisting in organizing this hospital unit. He was commissioned a Captain, Medical Corps, and sailed to the field of war in January, 1918. Dr. Jobe saw service in France and also was with the Army of Occupation in Germany. He returned home late in 1919 and resumed his practice in Little Rock, Arkansas, and established an enviable reputation as a physician and surgeon. It was always a pleasure to be associated professionally with Dr. Jobe. He loved companionship and was proud of his Army organization.

We feel that this community has lost one of its best citizens and the Pulaski County Medical Society one of its most loyal members.

Respectfully submitted,

WM. A. SNODGRASS, M. D.,
EDWARD O. LAY, M. D., Chairman,
S. F. HOGE, M. D.,
Committee.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

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EDITORIALS

RECOGNIZES MEDICAL ETHICS'
VALUE IN PROTECTING PUBLIC

Federal Judge's Charge To Jury In Suit Of
Brinkley Against Hygeia's Editor Points
To Significance of Code

The significance of medical ethics for the protection of the public is well emphasized by the charge to the jury, made by Federal Judge R. J. McMillan recently at Del Rio, Texas, in the case of John R. Brinkley's libel and damage suit against Morris Fishbein, M. D., editor of Hygeia, The Health Magazine, wherein a verdict was returned in favor of Dr. Fishbein, The Journal of the American Medical Association for June 3 points out.

The Journal has been publishing in installments the proceedings of the trial, which attracted wide attention because it involved the question of absolute privilege under the law of libel where the defense was truth and the pro-

tection of the public health. Pointing out that its June 3 issue contains the final installment of the proceedings, The Journal says:

"Most significant is the charge of Judge R. J. McMillan to the jury which rendered the verdict in this case. The entire charge merits most careful consideration; indeed, some of the statements might well be read to the senior class of every medical college in this country. Particularly to be considered is that section of the charge dealing with medical ethics. Here the judge said, and it is repeated for emphasis:

In determining what is professional and not professional conduct of the physician, you may take into consideration the rules of ethics followed by the great majority of medical men and which are recognized generally in their profession. . . . The term as applied to the liberal professions, such as the practice of medicine or the practice of law, is generally understood to mean that course of conduct pursued by recognized moral practitioners either of medicine or law.

It doesn't necessarily follow that every slight deviation or change by a doctor or a lawyer from what the general body of the doctors or lawyers do would be unethical, but if his course of conduct was far beyond and contrary to the course of conduct which the other members of his profession followed, then you would say that he was unethical either in the practice of medicine or in the practice of law.

As the evidence here shows, it has practically always been considered unethical for physicians to advertise, that is to say, to advertise further than to call the attention of the public to the fact that they were there ready to practice, and by some character of card giving their location or address, or if they specialize in some particular kind of practice to so advise the public. Advertisements by which prizes are offered to secure patronage or by which claims are made of superior skill or ability are not ethical, and you may consider those matters in this case in passing on the question as to the truth or falsity of the charge. In other words, it is one of the component elements that go to make up the question as to whether this man would be classified as a quack or not. It is not entirely determinative, but it may be that it is entitled to consideration. Accordingly, in determining what is professional and unprofessional conduct by a physician you are entitled to take into consideration the rules of ethics followed by the great

majority of the medical men and which are generally recognized in their profession. The conduct of the plaintiff Brinkley should not be measured against his own personal ideas with regard to what is proper. It should be measured against the ethics and approved conduct of physicians generally, and to such extent that his conduct as a physician varies from the rules of ethics recognized and observed generally he becomes subject to criticism, and criticism of his conduct is privileged unless unduly excessive and the terms of the criticism are unreasonable or unfair.

"Thus a Federal Court has recognized the significance of medical ethics for the protection of the public, and the jury after due consideration placed its approval on the right of the public to have the protection that medical ethics affords."

THE LAWYERS ARE NEXT

How familiar to all of us is the thought behind the speech of United States Solicitor General Robert H. Jackson to the junior bar conference of the American Bar Association in San Francisco, July 9th. As reported by the Associated Press this eminent attorney said: "Our bar cannot claim to be discharging its full duty to society by rendering service that is out of reach of an increasing proportion of our people." He declared that the high cost of legal services might cause the government to intervene and said that "something like this has happened to the medical profession." He further said that the very poor get legal service through public agencies, and that the well-to-do can hire good lawyers. But there are millions of people who belong to neither the well-to-do nor to the very poor. Their scale of earning will not let them pay so much for legal services as the modern lawyer charges. Their need is not charity but a low cost legal service. I have grave doubts that society will continue to support idle lawyers and at the same time go without their service once it wakes up to what it is doing. "In default of our attention," he said, "this problem will be likely to be forced upon the government."

Meet Mr. Thurman Arnold, you attorneys of America, then come over to our house. There's room for you in our bed.

PROCEEDINGS OF SOCIETIES

The following program has been tentatively announced for the Fifth Councilor District Medical Society meeting at Camden, October 5th: Scientific Session—Wm. Hibbitts, Texarkana; Chas. W. Mayo, Rochester. Banquet session to follow the afternoon session with talks by A. S. Buchanan, L. H. Reeves, Senator John H. Miller, Governor Carl Bailey, Congressman Wade Kitchens. The evening session will be a public meeting addressed by Don Harrell, Mayor of Camden, L. H. Reeves, President, State Medical Association of Texas; Chas. W. Mayo, and others. A feature of the public session will be a forum wherein the audience will be privileged to ask questions of the speakers.

The Southeast Arkansas Medical Society met at Wilmot, July 17th. Dr. D. T. Hyatt of Little Rock furnished the program. About twenty doctors attended this meeting. The ladies had their meeting at the home of Mrs. M. C. Crandall. There were about twelve members of the ladies auxiliary present. The Fourth Councilor District Medical Society will meet at Monticello on August 17th.

H. T. Smith, Secretary.

The Craighead-Poinsett County Medical Society met at Jonesboro, July 10th, for the following program: "Cancer of the Breast," R. H. Willett, Jonesboro, and "Tumors," J. H. McCurry, Cash. The motion picture, "The Growth of Cancer Cells" was also shown.

TULANE UNIVERSITY OF LOUISIANA SCHOOL OF MEDICINE

CLINICS:

During the week October 23 to 28, 1939, will be given daily. Registration \$5.00.

For program and other information, write

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New Orleans, La.

PERSONALS AND NEWS ITEMS

The August issue of The Journal gave the officers of The State Medical Board of the Arkansas Medical Society incorrectly. The newly-elected officers are: President, L. T. Evans, Batesville; Vice-president, D. E. White, El Dorado, and Secretary-treasurer, D. L. Owens, Harrison. Other members of the board are E. A. Callahan, Carlisle; Robert Hood, Russellville; J. C. Graves, Lockesburg, and R. J. Haley, Jr., Paragould.

Ruth Brittain has joined her brother, W. L. Brittain, in practice at Conway.

The following medical reserve officers were on duty for field training at Camp Joseph T. Robinson, Little Rock, during the summer: Capt. K. W. Cosgrove, Little Rock; Capt. C. H. Reagan, Marked Tree, and Capt. E. C. Gay, Little Rock; 1st Lieutenants H. T. Capel, Pine Bluff; R. H. Whitehead, Jr., Camden; V. C. Binns, Monticello; R. M. Kelly, Sheridan, and W. E. Toney, Little Rock. Capt. John M. Samuel, Little Rock, trained at Camp McCoy, Wisconsin, and Lt. S. S. Kirkland, Little Rock, trained at Fort Leavenworth.

J. L. Kellum has joined the Cooper Clinic at Fort Smith as eye, ear, nose and throat specialist.

Dr. and Mrs. R. L. Bryant, Arkadelphia, spent the month of July in the Kiamichi and Ouachita mountains on vacation.

The following Central Advisory Committee on the Campaign to Reduce Appendicitis Mortality sponsored by the Southern Medical Association has been appointed under the chairmanship of J. K. Donaldson, state director: A. S. Buchanan, Prescott; W. R. Brooksher, Fort Smith; F. A. Corn, Lonoke; S. P. Cromer, Little Rock; W. B. Grayson, Little Rock; H. T. Smith, McGehee; S. J. Wolfermann, Fort Smith, and W. T. Wootton, Hot Springs National Park.

Dr. and Mrs. C. T. Chamberlain, Fort Smith, spent an August vacation in Nashville, Tennessee, and Natchez, Mississippi.

Dr. and Mrs. C. B. Billingsley, Fort Smith, spent a July vacation at Lake Lucerne.

The following attended the annual field training period of the 142nd Field Artillery, Arkansas National Guard, at Fort Sill, Oklahoma, in July: Major Fount Richardson, Fayetteville; Capt. Stanley M. Gates, Monticello, and Lt. L. M. Henry, Fort Smith.

Aris Cox, Helena, spent an August vacation deep-sea fishing off Mobile.

Dr. and Mrs. J. B. Jameson, Camden, spent a recent vacation deep-sea fishing off the coast of Florida.

Lt. Col. Pat Murphey, Little Rock, attended the Fourth Army Command Post exercises at San Francisco, August 6th-14th.

W. B. Grayson, Little Rock, recently addressed the Malvern Rotary Club.

Dr. and Mrs. C. H. Kennedy, Fort Smith, took an extensive motor trip to west coast points in July.

MARRIED—On July 2nd, W. M. Woods, Huntington, and Miss Mary Seawell, Muskogee, Oklahoma.

E. H. White and W. Myers Smith, Little Rock, led discussions at the regular meeting of the midwives of Conway County, at Morrilton, July 7th.

H. W. Savery addressed the Van Buren Rotary Club July 27th on "Socialized and State Medicine."

James W. Branch, Hope, took graduate work in Cook County Hospital, Chicago, during August.

Dr. and Mrs. J. E. Little, State Hospital, took a vacation tour in July to Louisiana, Alabama and Mississippi.

C. E. Arkebauer completed his 38th year of service with the State Hospital on July 15th.

Dr. and Mrs. B. A. Bennett, Little Rock, spent a July vacation in the northeastern states.

Fount Richardson, Fayetteville, has been appointed Major, Medical Corps, Arkansas National Guard.

RANDOM THOUGHTS OF THE SECRETARY

July 26th. We now nominate for oblivion, Thurman Arnold, the wonder-boy attorney who tried his case against the American Medical Association in the newspapers without first studying the law books. We rather surmise that the "assistant" in his title will become the most prominent part henceforth and that others will make speeches for the Department of Justice. If Laramie wants its ex-mayor back, which we greatly doubt, there should be little protest from New Deal Washington.

July 30th. Late arrivals take the pew just behind us this morning and a finger is pushed against our vertebral column. Turning, we view with mingled feelings, one Stanley M. Gates, fresh from the battle of Fort Sill, on this unusual occasion, a churchgoer. Stanley brings many a tale of the field artillery, perhaps the most interesting being Henry's lament that he could not report to the major because "I do not know where he is and I do not know where I am."

August 1st. The professional life of the community is saddened today by the sudden passing of Buckley, known to all as "Buck," a happy person whose smile and greeting will be much missed in medical meetings about here.

August 2nd. Merle Woods appears on the scene inspiring Wolfermann's comment "now that you are married I suppose you will start to practice medicine."

August 3rd. This day brings three letters to the column—Sam Allbright, Son Corn and Charlie Townsend. Corn sends voluminous advice on the treatment of various summer complaints and is printed elsewhere in this issue that all may read. Townsend ventures forth a purist and takes us to task for the use of a split

infinitive. Properly chastened by this criticism, we remain most bewildered that he was not only able to discern this editorial lapse but that he had the amazing energy to write us, more or less legibly, about the whole thing.

OBITUARY

JAMES HOMER BUCKLEY, age 64, died at his home in Fort Smith, July 31st, of a heart attack. Born in Fort Smith, he attended the University of North Carolina and graduated in medicine from Tulane University in 1896 and had practiced his specialty of eye, ear, nose and throat in Fort Smith for 43 years, except for a period spent abroad in postgraduate study. He was a member and past-president of the Sebastian County Medical Society and had served his county society as delegate to the Arkansas Medical Society on several occasions. He has been chief of staff of Saint Edward's Mercy and of Sparks Memorial Hospitals in Fort Smith. In addition to his membership in the American Medical Association, he was a fellow of the American Academy of Ophthalmology and Otolaryngology. He was a member of the First Baptist Church. Surviving him is an only daughter, Miss Katherine Buckley.

DOCTOR! You are invited to attend . . .

THE OKLAHOMA CITY CLINICAL SOCIETY'S NINTH ANNUAL FALL CLINICAL CONFERENCE

October 30, 31, November 1, 2, 1939

SIXTEEN DISTINGUISHED GUEST LECTURERS

DR. ALBERT H. ALDRIDGE, Obstetrics, New York; Clinic. Prof. Obs. and Gyn., Columbia University; Chief Surg. Woman's Hosp., N. Y.

DR. EDGAR G. BALLENGER, Urology, Atlanta; Urologist Crawford W. Long Memorial Hosp.; Consulting Urologist Henry Grady Memorial Hosp.; Pres. Amer. Urological Ass'n.

DR. LEWELLYS F. BARKER, Internal Med., Baltimore; Prof. Emeritus of Med., Johns Hopkins U.; Visiting Phys., Johns Hopkins Hosp.

DR. LOWELL S. GOIN, Roentgenology, Los Angeles; Consulting Radiologist, Los Angeles Board of Education; Radiologist L. A. Orthopedic Hosp., Radiologist and Chairman of Exec. Board Queen of Angels Hosp.

DR. HARRY S. GRADLE, Ophthalmology, Chicago; Extra-mural Prof. Northwestern U.; Chief of Staff, Ill. Eye and Ear Infir.; Attending Oph. at Michael Reese Hosp., Chicago.

DR. JOHN A. KOLMER, Pathology, Philadelphia; Prof. of Med., Temple U.; Director of Research Institute of Cutaneous Med.; Physician to Temple U. Hosp.

DR. FRANK H. LAHEY, Surgery, Boston; Director of Lahey Clinic, Boston; Surgeon-in-chief, New Eng. Baptist Hosp.; Surgeon-in-chief, New Eng. Deaconess Hosp.

DR. JOE V. MEIGS, Gynecology, Boston; Instr. in Surg., Harvard Med. School; Visiting Surg., Mass. Gen. Hosp.; Surgeon, Ponderville Hosp., Mass. Dept. Public Health.

DR. A. GRAEME MITCHELL, Pediatrics, Cincinnati; Prof. of Ped., Univ. of Cincinnati Col. of Med.; Director and Chief of Staff, Children's Hosp., Cincinnati.

DR. EMIL NOVAK, Endocrinology-Gynecology, Baltimore; Assoc. Prof. Gynecology, Johns Hopkins Med. Col.; Visiting Gyn., Bon Secours and St. Agnes Hosp.

DR. HOBART A. REIMANN, Internal Medicine, Philadelphia; Prof. of Med., Jefferson Med. College; Attending Physician, Jefferson Hosp.

DR. ERWIN R. SCHMIDT, Surgery, Madison; Prof. of Surg., Univ. of Wisconsin Med. School; Chief Surg., State of Wisconsin Gen. Hosp.

DR. HERMAN C. SCHUMM, Orthopedics, Milwaukee; Clin. Prof. and Director of Division of Orthopedic Surg., Marquette Univ.; Assoc. Prof. of Orthopedic Surg., Univ. of Wis.

DR. ROCK SLEYSER, Psychiatry, Wauwatosa, Wis.; Board of Trustees, Marquette Univ.; Medical Director, Milwaukee Sanitarium; President of American Medical Association.

DR. MARION B. SULZBERGER, Dermatology, New York; Asst. Clin. Prof. of Der. and Syph., Skin and Cancer Unit of N. Y. PG Med. School and Hosp. of Columbia Univ.

DR. WILLIAM A. WAGNER, Otolaryngology, New Orleans; Asst. Prof. Otolaryn., Tulane Univ. School of Med.; Visiting Surg., Charity Hosp.; Visiting Surg., Eye, Ear, Nose and Throat Hosp.

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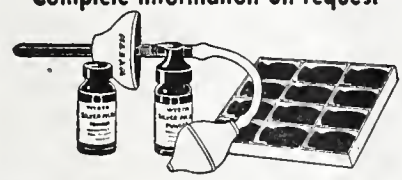
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HEALTH TALK

My Dear Doctor:

In reading August issue of Random Thoughts of the Secretary I noted under dating of July 3 the following statement, "The final hours are somewhat distressing for us due to certain excess physiological activities incident to the summer season." After reading this line several times and calling together all my scant long distance diagnostic measures I felt the urge to make a short contribution which in all future reference shall be known as "Health Talk." It shall be as follows and is taken in toto and verbatim from Gunn's Domestic Medicine, Raymond's Copy.

CHOLERA MORBUS or PUKING and PURGING

This disease is generally produced by the food becoming rancid or acid on the stomach; and if from an over quantity of bile, the purging and puking will show it, by the discharges being intermixed with a dark bilious matter. This disease is also produced from breathing damp air; or from being exposed to inclement weather; or from getting the feet wet; but mostly from eating such foods as disagree with the stomach and bowels. The mind has a powerful influence in this complaint; and I have frequently observed in my practice, that the disease was produced in many cases of females in delicate health by passions of the mind, as well as by sudden stoppage of the menstrual discharge. The disease generally commences with sickness of the stomach, painful griping, succeeded by heat and thirst, quickness and shortness of breathing, with a quick and fluttering

pulse. When the case is dangerous, the extremities become cold; the perspiration or sweat is clammy and cold; there is also cramp, great change and irregularities of the pulse, which, when accompanied with hiccuping, are strong evidences of approaching death.

REMEDIES

Apply to the stomach and belly cloths steeped in warm water, or in spirits in which camphor has been dissolved; or you may apply a warm poultice, made of garden mint stewed; or a poultice made of mustard and strong vinegar will be found of great service, applied to the stomach; or a blister of cantharides or Spanish flies: and in extremely dangerous cases, where it is not practical to draw a blister in the usual way, do not hesitate to scald the part with boiling water, at the same time applying hot rocks or bricks to the feet. Give hot whiskey toddy, or that made of any other kind of spirit; let it be strongly mixed with peppermint, or ginger, or calamus; and let chicken water or thin gruel be freely taken by the patient. Give glysters (1) made by pouring hot water on the inner bark of the slippery elm, or those made of flax-seed tea, either of which must be thrown into the bowels milk warm. See under the head of glystering, for the manner of administering this operation. The first object in this dangerous complaint is, to cleanse the stomach and bowels of any offensive matter; after which the giving of thirty-five or forty drops of laudanum in mint tea will be proper; and if these do not arrest the progress of the disease, make a glyster of a tablespocnful of starch and a half pint of warm water, in which put a teaspoonful of laudanum, and throw it up the bowels as directed under

the head "Glyster." If this does not give relief in fifteen or twenty minutes, repeat it again and again.

If the person who is attacked is of full habit, that is, fat, stout, and vigorous, the loss of some blood by the stop to it; for this will evacuate the bowels, operate as arm and warm bath will be necessary. If the attack be moderate, a good dose of calomel will generally put a stimulus, and remove the diseased action.

Very frequently this disease appears as a symptom of a fever; and then of course you treat it as you would any other kind of fever. In all cases, after giving laudanum to relieve your patient, particularly when you have used it to an extent, it is proper and necessary to give after relief a good dose of castor oil. Persons who are subject to this sudden and dangerous disease should be cautious as to what kind of food they indulge in; and should be very particular in avoiding the causes which produce it, because, by imprudence, the disease may return with double violence and danger.

The rapidity with which Cholera Morbus proceeds requires the remedies to be promptly applied; for the disease is, generally speaking, highly dangerous, and soon terminates the life of the sufferer, unless relief is speedily obtained. A few hours suffering, in severe cases, weakens the patient surprisingly; and therefore, you will easily see the great importance of nourishment of light, stimulating, and strengthening kind being given. Besides attention to nourishing diet, wine with any bitter ought to be given, or cold camomile tea three or four times a day, the dose a wine or stem glass full, or elixir vitriol, ten drops three times a day, in the tea made of black snake-root; besides which all, flannel ought to be put next to the skin of the patient. But, in concluding my remarks on the treatment of this complaint, I must urge the particular necessity of the warm bath and gysters, as almost certain means of relief, if properly and timely administered.

References: 1. Glysters, Gunn's Domestic Medicine, Raymond's Copy.

Language almost fails to express the great value of this innocent and powerful remedy, in very many diseases to which mankind are daily, and even hourly subjected; and I most sincerely regret to say, that it is a remedy not only too little known, but too seldom used both by physicians and families. This disregard for glystering must either arise from the supposition that the operation is too troublesome or from false and foolish delicacy, which forbids the use of an instrument by which thousands of lives have been preserved in extremely critical circumstances, and which every mistress of the family should be perfectly acquainted, so as to be able to administer a glyster when required in sickness. And I do here most positively assert, and that too from my experience, that hundreds to whom I have been called in case of colic, must have died, had it not been for the immediate relief given by glysters.

Glysters principally act by exciting the lower portion of the intestinal tube, and sometimes from the effect of sympathy. In the latter case the discharges are sometimes copious, or, in other words, of large quantity; and to produce these full discharges by stool, you are frequently to repeat the glysters of warm water, so tempered as to be pleasant to the feelings of the patient, and in such quantities as the bowels will bear. I have continued to give these warm water injections for an hour or more in many instances, before I could overcome or subdue spasm or colic; and in cases of great constipation the water is thrown up as far as possible,

and the edges of the fundement pressed together as you draw out the pipe of the instrument, so that the glyster may be prevented from returning until it has produced the intended effect.

The best method of administering glysters in extreme cases, is first to give purgative medicines in the usual manner, and as directed under the different complaints mentioned in this work, and when it becomes necessary to give glysters, to give them so as to assist the medicine taken into the stomach in their operations.

The old plan of administering glysters is as follows: You are to take a beef or hog's bladder which has been blown up and suffered to get dry; and after inserting or fastening a short hollow reed or quill in it, cut off at both ends of the barrel, you are to put the glyster into the bladder. The end of the reed or quill is now to be covered with some oil or lard, and gently put up the fundement about one inch, by an assistant, and the sides of the bladder pressed together so as to throw its contents as far as possible up the bowels. The new invention consists of a pewter mug or syringe pipe which holds one quart of water. The small end of the tube is placed in the fundement as above and pressure made on the syringe handle which throws the glyster up into the bowels. The patient is to be placed on the edge of the bed, with the bottom a little over the edge, and the knees drawn up towards the belly. The pipe is pushed up very gently into the fundement; the operators hand near the thigh a little backwards towards the backbone, and the contents to be forced out by gently pushing the handle of the syringe with one hand, while with the other the syringe is firmly held. Glystering is one of the most powerful, innocent, mild, and beneficial remedies known in the science and practice of medicine.

Realizing that perhaps you present-day X-ray (I can't spell roentgenologists) men may not be well acquainted with all the early eighteenth century remedies I send you this particular Health Talk so that you may have its protection on your future week-end forays into the neighboring countryside.

Well, my friend, the writing urge, aforementioned, is rapidly waning so without further ado I stop.

Yours truly,

F. A. CORN.

WOMAN'S AUXILIARY

MRS. H. E. MURRY, Publicity Secretary
Texarkana

July 15, 1939.

Dear Officers, Chairmen and County Presidents:

Comes the summer! And with it relaxation from "organized labor"—be it Medical Auxiliary meetings or whatnot! However, I visited three auxiliaries during June and found them most enthusiastic.

The A. M. A. was both enjoyable and instructive. St. Louis is the birthplace of the Auxiliary, you know, and so we celebrated our seventeenth birthday there this year.

As the new National Chairmen will have their plans ready in August, our State Chairmen will receive them shortly after that. You will hear from them, then, about the first of September.

Our Fall Board Meeting will be held early this year, in September. Since it will be a conference of officers, chairmen and county presidents for the purpose of submitting and formulating plans for the year, no re-



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ports of work already done will be expected at that time. You will have an opportunity to meet chairmen and receive their instructions to take back to your Auxiliary.

Then, too, there are state officers and chairmen in every district in the state, and I am sure that they will be glad to visit auxiliaries whenever possible upon the invitation of county presidents.

In the Journal each month there will be a letter for you from some co-worker. Please look for these communications and urge each Auxiliary member to do so. County Presidents will please send notice of meetings and any personal news items possible to Mrs. Murry for the Journal each month.

READ THE JOURNAL

Meanwhile, let us turn our attention to small tasks of organization work, a part which each individual member can do. Let each of us casually get in touch with each doctor's wife in our county this summer, and in some small way make her know that we are looking forward to meeting again as doctors' wives this fall.

Also this friendly contact with non-members may mean some new interest. At least it is a means of promoting that feeling of fellowship which is a part of our great profession.

I should like for you to pass this letter to each of your doctors' wives as my greeting for a happy summer and my wish for an early meeting with you this fall.

Sincerely yours,

BESS KITCHENS, President.

When men first went to sea, thousands of years ago, they had no instruments with which to take their bearings. They kept well in sight of land and steered by the sun in the daytime and by the pole star at night. Today the navigator has accurate instruments and charts for finding the position of a ship at sea. By using his sextant, his nautical almanac, and his chronometer at stated intervals, he knows exactly where he is and how to plot the course of his ship.

The person who has a physical examination at regular intervals through life is like the good navigator who takes his bearings at regular intervals on a voyage. There are many people whose physical equipment can be depended on, both now and in the future, to make life worthwhile. There are others who are headed for a physical breakdown, leaving them stranded. Many a life voyage ends on the rocks because a traveler failed to take his health bearings regularly.

The captain of a ship, to find his position at sea, must depend on instruments and charts. An individual to know where he stands physically must depend on a physician. We can see only the outside of our bodies, but a physician has ways of knowing what is going on inside. He knows how each part of the body is made, how it is related to other parts, and how it works. Nowadays he also has accurate instruments and tests to help his eyes and his ears and his fingers in making a physical examination.

Our body machinery runs night and day from birth to death. No matter how perfect it was to begin with or how well we take care of it, certain parts are apt to show the effects of wear and tear during middle age and beyond. This is one reason why an annual physical examination is particularly important for people over 45. If we know what our physical limitations are, we can learn how to adjust our way of living in order to avoid overstepping them.

For women who are undergoing the natural physiological changes which usually begin between the ages of 40 and 50, a thorough physical examination is advisable.

Certain diseases usually do not appear until later life and then develop slowly. Hardening of the arteries, chronic kidney disease, and heart disease may gain headway in the body before a person is aware that something is wrong. If the trouble is detected in its early stages, an individual, by following his doctor's instructions, may be able to continue to work and to enjoy life for many years to come.

Most of us want to look well and to feel fine. We don't like to be nagged by pain or to look old before our time. We want to avoid the worry, the expense, and the loss of wages due to serious illness. We want the different parts of our bodies to work so well together that we can forget all about them and be free to work efficiently and to enjoy ourselves. We want to live to a sickness-free old age.

We cannot achieve this by just drifting along. We need to follow a plan of living in which diet, rest, and exercise all take part in promoting health. We need also to pause and take our bearings at regular intervals. A periodic health examination will no more prevent all ills than taking the bearings of a ship will prevent all sea disasters. It will, however, tell us where we stand at stated intervals and help us to chart our course through life more intelligently.

(Taken from a Metropolitan Life Insurance Booklet.)

MRS. J. B. HESTERLEY, Physical Health Chairman.

The Washington County Medical Auxiliary held both regular meetings in June. The first Tuesday night the auxiliary was honored by the State President, Mrs. Kitchens, meeting with the auxiliary for a dinner meeting at the hotel. The following morning the State Vice-President, Mrs. Loyce Hathcock, gave a breakfast for Mrs. Kitchens, other guests being officers of the auxiliary. The second meeting for June was at the home of Mrs. Callen. Twelve members were present, and the time was spent working on supplies for the Fayetteville City Hospital.

BOOK REVIEWS

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1938. Pp. 123. Chicago: The American Medical Association, 1939.

As formerly this volume reprints the proceedings of the Council, especially in connection with non-acceptance of remedies which do not possess rational therapeutic value. Other products have been offered with extravagant and unsupported claims. Of particular interest are the reports of "Collodaurum" (Kahlenberg Laboratories), Colloidal Sulfur, "Nupercainal" (Ciba) and "Sedormid" (Hoffman La-Roche). The volume also contains the preliminary report on sulfapyridine, in which careful therapeutic trials of its effects in pneumococcic, severe staphylococcic and Friedlander's bacillary infections is considered warranted, but directs attention to the lack of evidence indicating that the drug is as effective as sulfanilamide in the treatment of hemolytic streptococcic, meningococcic, gonococcic or Welch bacillus infections. Other reports are concerned with immune globulin (human) and ergonovine.

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LITTLE ROCK, ARKANSAS, OCTOBER, 1939

No. 5

UROGENITAL TUBERCULOSIS*

H. FAY H. JONES, M. D., and T. DUEL BROWN, M. D.
Little Rock

Urogenital tuberculosis is a systemic disease and not simply a manifestation of a tuberculous process in the urogenital tract. However, it is possible for the initial lesion to be in the genito-urinary tract. Frequently the primary focus can not be proved clinically.

In this discussion our remarks will be directed more to tuberculosis of the urinary tract than to the genital system. Genital tuberculosis is ultimately accompanied by tuberculosis of the lungs or kidneys in most instances and arises most commonly in the prostate, next in order of frequency being the epididymis, seminal vesicles, and testes. It is well known that in renal tuberculosis evidence of some form of genital tuberculosis is frequently present. In a recent study of 403 cases in which nephrectomy was performed at the Mayo Clinic for renal tuberculosis, genital tuberculosis was present in 71.5 per cent of the cases. At this same clinic in a later study of post mortem cases of genital tuberculosis, renal tuberculosis was found in 51.6 per cent of the cases.

In genital tuberculosis early diagnosis and radical removal of the infected genital organs offers the greatest hope for cure. However, with active pulmonary tuberculosis complicating the picture the physician is justified in withholding surgery for a reasonable length of time in the hope of first arresting the pulmonary lesion. If the seminal vesicals are involved, adequate drainage is not furnished by the ejaculatory ducts and from this region the disease progresses downward to the epididymis. Tuberculosis of the epididymis is more easily recognized than in other genital organs because of the accessibility of this structure to careful examination. We have had two cases in the past few years in which the tuberculous lesion had

progressed to such an extent that castration was necessary. We believe that such radical surgery as removal of the seminal vesicles and prostate is sometimes indicated; but this has not been necessary in the few instances of bilateral tuberculosis of the epididymis that we have seen.

Tuberculosis of the kidney may be unilateral or bilateral. In the present light of findings of the past few years it is now considered that early renal tuberculosis is always, or almost always, bilateral. Since the disease is blood borne, we presume that about the same number of organisms reach each kidney. One or both kidneys may heal spontaneously or one or both may progress to give the clinical form of unilateral or bilateral renal tuberculosis. The generous blood supply of the kidney may allow it to overcome the greater number of infections while they are yet incipient.

The closed type of renal tuberculosis may progress to the total destruction of the kidney before bacilli appear in the urine. The so-called pre-clinical lesions may heal without even being diagnosed. If they do not heal they will progress to the clinical lesions which are demonstrable by pyelographic study unless the lesions are of the closed type. The open or pyelitic type of tuberculous lesion, of course, is easily diagnosed by pyelography especially when it has progressed to the ulcerative stage. The open ulcerative lesion which is accompanied by the usual symptoms of renal tuberculosis never heals. Acute miliary tuberculosis is a form of generalized dissemination which affects both kidneys and is not benefitted by surgery but is almost always fatal.

Campbell says that except for the acute miliary form, urogenital tuberculosis is relatively rare in small children. However, the chronic varieties occur much more often than recognized and are usually diagnosed chronic pyelitis. It has been estimated that approximately one in every sixty cases of so-called chronic pyelitis in infants and small children is caseous renal tuberculosis. No doubt many adult patients with

*Read before the Sixty-fourth Annual Session of the Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

renal tuberculosis had tuberculous lesions of the kidney during childhood.

Although renal tuberculosis is characteristically a disease of early adult life, no age is exempt. Two-thirds of all cases occur between the ages of 20 and 40. Renal tuberculosis is more prevalent in males than in females and is more common in the white race than in the colored race.

The manifestations of renal tuberculosis are exhibited under a varied symptomatology, at times they are easily apprehended and at times they present the most difficult diagnostic problems in urology. The most common symptoms in chronic renal tuberculosis are frequency, urgency and burning on urination, and sometimes dysuria. These may be continuous and progressive or may be intermittent in character. Occasionally, an early symptom is hematuria accompanied by intermittent colicky pains which simulate kidney or ureteral stone. Persistence of any of these conditions requires investigation. Some patients may have chills and fever or a dull pain in the lumbar region accompanied by a mass in the side with no urinary symptoms and signs due to occlusions of the ureter on the corresponding side.

Early diagnosis in renal tuberculosis is paramount, but it is not as easy as some authors would lead us to believe. It must be borne in mind that urogenital lesions are only a part of the general disease from which the patient is suffering. Whenever one sees a case with a history of clear urine and of frequency of urination both nocturnal and diurnal, with a slight dysuria, tuberculosis must be suspected until it is proven otherwise. We believe that neglect in recognizing tuberculosis in other parts of the body often leads to failure in recognition of early kidney involvement. To make a diagnosis of renal tuberculosis after extensive caseation and excavation has occurred is no difficult task but the recognition of early pre-clinical lesions requires the greatest of care in correlating all the findings. The individual resistance of the patient and of the tissue coupled with the virulence of the particular strain of tubercle bacilli vary the pathology to such an extent that no set rule can be followed for the diagnosis of urogenital tuberculosis. Therefore, each patient presents an individual problem and with all the diagnostic armamentarium in the hands of competent examiners from 10 to 15 per cent of renal tuberculosis is not definitely diagnosed before operation.

Identification of tubercle bacilli in the urine obtained by ureteral catheterization is the ideal method of diagnosing renal tuberculosis. Urinalysis itself is not characteristic except that the tubercle bacilli have been found only in highly acid urine. Guinea pig inoculation of the urine from the separate kidneys is extremely helpful when properly done.

We believe that no urologic investigation for renal tuberculosis is complete without satisfactory roentgenograms and pyelograms of the urinary tract. We do not feel that intravenous urography is as valuable in the diagnosis of renal tuberculosis as retrograde pyelography, especially in early ulcerative lesions.

Cystoscopy is one of the best and one of the most reliable methods of diagnosing urogenital tuberculosis. It affords the observer a careful observation of the bladder for determining whether or not there is any tuberculous ulceration, edema and induration around the ureteral orifices or any retraction of the trigone on the side involved. We do not believe that retrograde pyelography if done properly and carefully is injurious to the tuberculous kidney and we believe that it will give a more accurate diagnosis than excretory urography. Repeated retrograde pyelograms are not necessary after a diagnosis of renal tuberculosis is made, however we do not hesitate to make additional pyelograms if the diagnosis is questionable.

We should like to stress the importance of conservatism in making a complete diagnosis but the patient should be given the advantage of all the methods because all are valuable and none are infallible. The final perfect diagnosis should accurately define the location of the disease in the urogenital system, the relative importance, the relation to the patient's health in particular, and to the whole body.

There has been a great deal of lack of understanding regarding the roll of surgical treatment in the control or arrest of all forms of tuberculosis. In the past, patients suffering with tuberculosis, particularly those with pulmonary disease, were considered unsuitable subjects for surgical intervention. Patients so handicapped remained unaided because they were denied the benefits of surgical interference. With the present attitude of performing surgery on patients who have a general tuberculosis, there is, in some cases, a tendency for over enthusiasm resulting in ill advised and unjudicious surgical treatment. We feel that a combination of the

conservative and the radical procedures is the method of treatment for renal tuberculosis. Since this is frequently not an emergency procedure, time and care for a diligent examination should be taken. However, when definite ulcerative or pathological lesions are found in one kidney and the other kidney is normal, we feel that the kidney involved should be removed before the condition becomes bilateral. Removal of a kidney containing ulcerative tuberculous lesions will not only remove the focus of infection from which the patient is suffering but will very likely prevent other complications. No doubt some diagnostic as well as surgical procedures temporarily lower the resistance of the patient but the patient's subsequent increased resistance to infection following removal of the infected focus will compensate for this short period of lowered resistance. The study of the patient together with good surgical judgment is necessary to decide when surgery should be performed. As definitely proved the structure of tuberculous lesions of the kidney, after removal, will not only remove the focus of infection which is difficult for the patient to combat will likely prevent other complications. The indication for immediate nephrectomy in unilateral tuberculosis of the kidney is established when repeated examinations demonstrate that the other kidney is not tuberculous and that the involved kidney shows signs of progression of the disease, a considerable pyuria and a diminished function. Conservative treatment is not justified because one cannot expect a spontaneous healing of even a small caseating focus, and the more time that is lost the greater the chance of the infection passing to the opposite kidney or the ureter and bladder. Patients with unilateral renal tuberculosis usually die in the course of five or six years. As contrasted to this high mortality statistics show almost 80 per cent permanent cure following early nephrectomy and from 50 to 60 per cent cure if nephrectomy is done late in the disease. The relief of bladder symptoms may be expected in at least 75 per cent of the cases of unilateral renal tuberculosis following nephrectomy instead of an almost positive assignment to invalidism if left to medical care. The mortality of nephrectomy is exceedingly low.

The question of bilateral involvement in the early cases is a difficult one. When renal tuberculosis is bilateral the only recourse is conservative treatment except in rare instances when surgery is indicated as an emergency to relieve toxemia from pyonephrosis or to correct the in-

tractable vesical lesions. In such instances one of the kidneys is usually so completely destroyed and so involved with mixed infection that the organ is practically functionless anyway. We have seen immediate relief of symptoms that was remarkable in many of these cases after nephrectomy. When the function of one kidney is markedly decreased and the function of the other is only slightly decreased, removal of the former usually helps to increase the function of the latter and the bladder symptoms are greatly alleviated. Frequently the more acute the lesion in the bladder the more quickly the alleviation of symptoms following removal of the kidney. Of course, when a patient has an advanced bilateral involvement, nephrectomy is contra-indicated and medical measures will have to be depended upon. The general treatment should be measures appropriate for tuberculosis of the lungs, such as a generous diet of nourishing foods, fresh air, rest, proper hygiene, etc. All persons who have been nephrectomized for a tuberculous lesion should be treated with sanatorium care from 3 to 6 months in order to give their generalized tuberculosis process a chance to heal thereby improving the end results. If this can not be done at least the general care of rest, diet, sunshine, etc., should be carried out at home for a considerable period of time and these patients should be kept under observation for a long time.

Quartz Light therapy has been used as a part of the general plan of treatment of urogenital tuberculosis, the plan being to remove the active lesions by surgery, so far as this may be done advantageously, and then to follow the surgery by a long course of after care. It is also employed in the treatment of inoperable cases along with the conservative treatment outlined above.

Natural resistance to tuberculosis infection varies markedly. Not infrequently one sees a patient who refused surgical intervention carrying on for ten or more years and yet having extensive, active bilateral involvement.

In closing we should like to re-assert the need for early and accurate diagnosis of urogenital tuberculosis, on which alone correct treatment can be based; and to state with a great deal of pleasure that we find we are seeing fewer and fewer cases of advanced urogenital tuberculosis. Due to the fact that tuberculosis is a constitutional disease the more alert general practitioner

recognizes the early symptoms and realized the importance of an early diagnosis.

SUMMARY

1. Genital tuberculosis is ultimately accompanied by tuberculosis of the lungs or kidneys in a large percentage of cases.

2. Early renal tuberculosis is considered by most authorities to be bilateral.

3. One or both kidneys may heal spontaneously or one or both may progress to the chronic form of renal tuberculosis.

4. Many times the so-called chronic pyelitis in children is in reality an early tuberculous process of the urinary tract which has not been recognized.

5. In the greater percentage of cases of renal tuberculosis there is a general involvement.

6. Sufficient time should be given to accurately diagnose the condition but once a definite unilateral involvement with an ulcerative lesion is proven then surgical removal of the kidney is indicated.

7. The pre- and post-operative care is essential. In some cases, care in a sanatorium is certainly indicated. We believe that post-operative medical care is equally important, if not more important than pre-operative care.

PHYSICIANS WANTED FOR CCC DUTY

Medical service for the Civilian Conservation Corps has, in the past, been furnished by the medical section of the Officers' Reserve Corps with the exception of a few doctors who were employed on a contract basis. A recent decision of the Director of the CCC and the War Department permits the employment of doctors who are not Medical Reserve officers in this service.

Doctors needed for this service may now be employed under the rating of civilian employees or on a contract basis, the initial pay being \$2,600 per annum. All doctors interested in this type of service are requested to submit their applications to the office of the Surgeon, Headquarters Seventh Corps Area, Federal Building, Omaha, Nebraska, giving date when available and preference of assignment in the following states: Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Missouri, Kansas and Arkansas.

COMING MEDICAL MEETINGS

Kansas City Southwest Clinical Society, Kansas City, October 2-5th.

Fifth Councilor District Medical Society, Camden, October 5th.

Postgraduate Study Course, Arkansas Medical Society, Little Rock, October 10th-11th.

First Councilor District Medical Society, Paragould, October 17th.

Second Councilor District Medical Society, Searcy, October 19th.

Oklahoma City Clinical Society, Oklahoma City, October 30th—November 2nd.

Southern Medical Association, Memphis, November 21-24th.

FRACTURES AND DISLOCATIONS OF THE NECK*

JOS. F. SHUFFIELD, M. D.
Little Rock

Knowledge of the fundamentals of fracture treatment is rapidly spreading throughout the country. It should be emphasized that these fundamentals are just as applicable to the cervical region as to other parts of the body.

The vertebral column has the double purpose of protecting the spinal cord and of giving support to the head and trunk. Therefore, static deformities may be caused by vertebral fractures and dislocations while, at the same time, the spinal cord and nerve roots may be injured. If the spinal cord is completely severed, a permanent paralysis results. If the cord is but pressed upon by displacement of the bones, the paralysis will clear up when the displacement is corrected, provided the pressure does not remain too long. Many cases of paralysis in spinal injuries are caused by pressure from hemorrhage and edema. These rarely cause permanent paralysis because the blood clot and edema will soon be absorbed.

A proper physical examination is essential in order to determine the location and extent of injury. Fractures and dislocations of the neck are produced by hyperextension, marked flexion anteriorly, and by lateral flexion with rotation. A careful detailed history of the injury is therefore important and too, the next few hours is important, noting; the direction of the forces, the amount of force applied to the neck, the time of numbness or paralysis and how it progressed. The first two things that should be done are: (1) Take note of shock and start treatment for same if needed, and (2), Examine the patient neurologically. The only precaution, but an important one, is never to allow any forward flexion of the cervical spine while in travel to treatment or during treatment. The danger of permitting forward flexion of the head must be constantly kept in mind during the whole course of diagnosis and treatment. Paralysis occurring immediately nearly always means severance of the cord. Numbness progressing towards paralysis or to definite paralysis means pressure either by bone, ligaments, hemorrhage or edema in or about the cord. When the cord is severed, the paralysis is permanent. In any of the other instances, the condition can be

*Read before the Sixty-fourth Annual Session of the Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

cleared up with proper reduction. The roentgenogram is our most valuable asset and the one on which a final diagnosis is always made. If X-ray equipment is not immediately available, then the injury should be considered serious until proven otherwise.

As in every other fracture and dislocation, the object of treatment is to reduce the displacement as well as possible and then to maintain this fixation in a good and comfortable position long enough for bony and ligamentous union to take place. This fixation should permit free access to, and use of, the extremities.

The lumbar vertebrae and the twelfth dorsal vertebra are most common locations for injury to the spine, then the cervical spine. Fractures and dislocations in the cervical region are far more dangerous than in other locations because death may follow immediately. If death does not occur at once, the whole body may be paralyzed. In lower spinal injuries the respiratory muscles and the arm muscles escape paralysis.

Spinous Processes: The simplest type of injury to the cervical spine is a fracture of the spinous process. Since the elements of the supraspinal ligament which attach to the spinous processes are not powerful, a fixation period from four to six weeks suffices. Treatment consists of traction in hyperextension until pain and muscle spasm have disappeared, followed by ambulatory fixation either in plaster cast, molded leather collar or a Thomas collar, depending on the severity of the injury.

Transverse Processes: The transverse processes are very short and serve for muscle attachments. They are seldom fractured and need only fixation for four to six weeks as in the treatment of the spinous processes.

Pathology in Hyperextension Injuries: In hyperextension injuries of the neck, the arch of the first cervical vertebra may be fractured on both sides at the grooves for the vertebral arteries, also, the second vertebra may be fractured through both inter-articular portions. A small piece of the upper articular process of the second cervical remains attached to the posterior ligament of the first cervical vertebra. The odontoid process or body of the second cervical may be fractured. The second intervertebral disc and anterior longitudinal ligament may also be torn. There may be fractures of one or more of the spinous processes below the

second vertebra and evidence of cord and nerve root injury may be present. In such injuries, death is likely at the time of injury. If death does not occur immediately, then anterior-posterior and lateral X-rays should be made. The relation of the odontoid process to the lateral segments of the atlas is an important guide and an anterior-posterior view should always be taken through the open mouth.

Treatment of such a case is reduction and application of a cast to include the head, neck and body down to the pelvis. This should be done at once under local anesthesia using traction and bringing the head into neutral or natural position for casting. This can easily be done on a special table or by using a narrow thin board or piece of steel over the end of a table so that it passes from the base of the neck downward between the scapulae to the buttocks. The cast is then applied over this. X-rays should be made again just before the neck part of the cast is applied. Making the head and body parts of the cast first, affords easy changing of the position of the neck if needed.

Odontoid Process: Fractures of the odontoid process are serious injuries. The odontoid is one of those regions where bony union takes place very slowly and where fibrous union alone is prone to occur. These facts make complete immobilization necessary. A complete plaster jacket and head piece applied in the manner described above should be worn for a period of from two to three months. A neck brace or molded leather collar should then be worn for a similar period of time. Fixation during the later stages of treatment may be guided by X-ray examinations, but as a rule, fixation should not be discarded before the end of six months. This might appear like overtreatment, but on the other hand, inadequate fixation may result in non-union or fibrous union.

Pathology in Hyperflexion Injuries: Pathology in excessive flexion neck injuries is usually in the middle and lower parts of the neck. If there is a forward as well as a flexion force in the mid-portion of the neck, the injury may be unilateral, or there may be bilateral dislocation of the articular process or processes in the first instance or, forward displacement of the body if bilaterally dislocated. In the last instance, the cord may be under pressure or may be severed.

If there is a break in the mid-portion, the fracture is most likely to be in the posterior arch,

while if it is the sixth cervical, the fracture is most likely to be in its inter-articular parts. In many cases of dislocation, the anterior upper angle of the vertebral body below is broken off and goes forward and downward on the vertebra below. The intervertebral disc may be ruptured. The fracture may be a pure flexion fracture in the lower part of the neck or it may be a compression fracture. The cord here, as in the upper cervical region, may be under pressure or may be severed. Severance of the spinal cord is manifested by immediate death or paralysis of the lower extremities, bladder, rectum, and partial paralysis of the arms.

Treatment of hyperflexion injuries of the neck is immediate reduction with application of a cast to include the head, neck and body down to the pelvis. This can usually be done under local anesthesia by:

1. Traction and hyperextension.
2. Traction, rotation and hyperextension.
3. Traction, lateral flexion, rotation and hyperextension.

The selection of these movements depends on the pathology present which is determined by X-ray examination.

Complications: The complications of fractures and dislocations of the neck are all due to cord and nerve injury. I wish to discuss only a few of the complications.

(1) **Loss of Control of Bladder:** There is less trauma and less likelihood of infection in the use of an indwelling catheter with frequent irrigations of a mild antiseptic solution than to make frequent catheterizations. These patients soon develop an automatic bladder.

(2) **Loss of Control of Rectum:** The distention of the abdomen during the first three or four days can usually be controlled by hot turpentine stupes, esserine and surgical pituitrin. The leakage from the rectum should be removed immediately on passage. To allow the buttocks to remain bathed with feces increases the likelihood of ulcers and infection of this region.

(3) **Decubitus:** Bed sores are likely to occur over any bony point such as the heels, sacrum, scapula. These can be prevented by good nursing, cleanliness, frequent change of position, and padding and massage around the bony points.

(4) **Foot and Wrist Drop:** These conditions should be prevented by proper splinting or casting in the beginning.

(5) **Non-union:** Non-union and recurrence of the deformity at point of injury may occur due to lack of fixation, to fixation of insufficient length and to interposition of soft parts. The deformity may return at once after the fixation is removed or it may slowly return. Pain and loss of function also returns with the return of the deformity. For this reason, X-rays should be made as often as indicated after removal of the fixation as well as during the period of fixation. If the deformity recurs after the long period of fixation, then internal fixation by a bone graft is indicated.

1008 Donaghey Building.

The story leading up to the publication of the new "Canned Food Reference Manual," recently compiled by the Nutrition Laboratory, Research Department of the American Can Company, is an intensely interesting one. It was brought about through the realization that not only must reliable information on canned foods be made available to laymen but—equally important—more technical information on this great class of foods should be provided those professions which deal intimately with canned foods.

The products of the American canning industry have become so important to our modern civilization that it is indeed difficult to visualize how present-day life could proceed without commercially canned foods. For many years canning was a secret art and foods in tin containers were regarded as unusual or even mysterious. It is a well-known fact that people seldom trust to the fullest extent any class of foods whose method of manufacture is not clear to them.

Several decades ago, progressive forces within the canning industry realized the necessity of a better popular understanding of the nutritive values and wholesomeness of commercially canned foods. Since that time much educational publicity on canned foods has been issued for the benefit of the layman consumer.

Less than five years ago, it was found essential to provide more technical information for the professions. Consequently, in 1935, the American Can Company inaugurated its present practice of issuing each month in the journals serving the medical, dental, nursing, dietetic and home economics professions, a factual release covering in technical vein some phase of canned food knowledge. The great demand for some type of publication which would bring all these releases together within one binding, was met first by publication of "Facts About Commercially Canned Foods" in 1936, and later by issuance of "Nutritive Aspects of Canned Foods" in 1937. The present text has been prepared to amplify and extend, rather than to replace, the above prior publications.

FOR SALE—The office and practice of the late Dr. J. H. Colay. A good opening. Write Mrs. J. H. Colay, Morrilton, Arkansas.

INTERPRETATION OF KIDNEY FUNCTION TESTS*

C. E. DE ANGELIS, M. D.
Little Rock

The main function of the kidney is excretion. It is a complex organ made up of approximately a million small absorbing and filtering systems. By its continual excretion the kidneys take care of the resulting products of protein metabolism, and in so doing, prevent their undesirable accumulation in the body. Hydrogenion balance is aided by varying excretion of such minerals as acid and alkaline phosphates. Should the above function become hindered, failure of the first will result in azotemia, associated with its classical symptom complex, while failure of the second will result in acidosis.

As we know, about 55% of the phosphate excreted by the kidney is in the form of its acid salt, and its accumulation in the blood would increase the hydrogenion concentration in that fluid. In complete loss of kidney function we have the term referred to by our modern writers as absolute renal insufficiency, or true uraemia. The latter term should only be used when the kidney is the source of failure causing an azotemia. Absolute renal insufficiency rarely develops instantaneously in a case of nephritis unless it is a fulminating acute diffuse glomerulonephritis. There are stages of varying functions between the normal and the absolute which we call relative renal insufficiency and in this stage one never finds high values of nitrogen products in the blood.

In its ability to excrete, the kidney has a well developed "variability of function." A dilute urine is manufactured when the body must mainly get rid of fluid; a concentrated urine, when its chief function is to rid the body of solids. As the kidneys begin to fail, the concentrating and diluting ability becomes less and less until a fixed point of 1.010 specific gravity is reached (protein free blood plasma). At this stage, forcing or withholding of fluid will have no effect.

Even when the kidney has reached a point of fixed function, compensatory polyuria may be so well marked that nitrogenous end-products cannot be detected in the blood above normal. In other words, instead of excreting a solid in 2% solution in a liter of fluid it will excrete two

liters of fluid in a 1% solution. However, absolute renal insufficiency will develop in such cases if it is precipitated by increased protein tear of the body and diminished water to tissues induced by disease or low fluid intake.

It must be emphasized that kidney function tests, while they may determine pathological changes, are mainly used to determine kidney performance. Such tests may show positive results in conditions entirely extrarenal, as a decompensated heart, severe anemia, pathological changes in the remaining genito-urinary tract, endocrine disturbances; and again, function as determined by some of the tests may show normals when extensive damage, temporary or permanent, has taken place. As we have already seen, function is variable and not single. When one function is normal the other may be abnormal so that a number of tests should always be used.

Absolute renal insufficiency is diagnosed only when the kidney's diluting and concentrating ability has ceased to function and when there also occurs the accumulation of end-products of protein metabolism in the blood, called azotemia. However, such accumulation may occur from causes other than renal, associated with a normal and variable specific gravity of urine.

Relative insufficiency is diagnosed only when the kidneys show a progressive decrease in diluting and concentrating power in the absence of azotemia.

To test such processes of the kidney simple tests have been devised.

(1) For diluting ability, the lowest specific gravity in a series of urine samples is taken (under test conditions to be mentioned).

(2) For concentrating ability, a number of methods are available; the highest specific gravity obtained in a series of specimens, blood urea clearance tests, urine urea concentration and the excretion of dyes, such as phenol-sulphonphthalein.

In order to obtain full information, more than one procedure should be carried out. A low urea clearance alone is no indication that the kidney's function is decreased. Specific gravity readings in conjunction will tell the tale. A fixed or low specific gravity immediately points to insufficiency of the kidneys, while a high specific gravity points to a number of other conditions, the chief one being a decompen-

*From the Department of Bacteriology and Clinical Pathology, University of Arkansas School of Medicine, Little Rock.

sated heart. Again, high blood urea values, low excretion of foreign dyes, etc., in themselves mean little. They are often the result of oliguria due to extrarenal factors.

Blood urea and nonprotein nitrogen are normal in relative renal insufficiency, or even when the specific gravity has become fixed at 1.010 with a favorable polyuria. It has been estimated that almost 55% of the kidney's function can be lost without the presence of azotemia. Again, a high nonprotein nitrogen or urea is not always a hopeless laboratory sign. In cases of acute nephritis a high urea may soon become low as the acuteness disappears.

Creatinine determination is not commonly used, but with a retention of six or more milligrams per hundred c.c. of blood with increased phosphates, it is a good indication of approaching death.

By using Mosenthal's method of feeding, or by keeping the patient on his own daily diet, including at least a pint of fluid with each meal, with abstinence from liquids between feeding, valuable information can be obtained. Before breakfast the patient voids and specimens are collected at two hour intervals from 10:00 a. m. to 8:00 p. m. Urine is voided at 8:00 a. m. the next morning after saving all night specimens. Using the above regime of preparation, the following are indications of impaired renal function.

(1) Fixed specific gravity of 1.010 (protein free blood plasma) with no variation. A higher fixation usually signifies retention of fluid as a result of renal or extrarenal causes. It should be mentioned that the ability to concentrate the urine is the first to disappear, followed by a loss of diluting power.

(2) Failure to secrete urine showing a variation of at least nine points in the specific gravity.

(3) Volume of night urine in excess of 500 c.c.

(4) Polyuria, with or without frequency of urination. Nocturnal type of 500 c.c. or more is strongly suspicious, as is a ratio of one to one or a reversal with an increased excretion at night.

In conclusion, function tests correctly interpreted are extremely valuable in diagnosis, prognosis and treatment.

The Ninth Annual Fall Clinical Conference of the Oklahoma City Clinical Society will be held October 30, 31, and November 1, 2, at the Biltmore Hotel in Oklahoma City. This post-graduate medical assembly again offers

the profession of the Southwest another series of intensive clinics and lectures covering the most important fields of medicine, surgery, and the specialties. The sixteen guest lecturers this year are among the recognized leaders in their respective fields and have chosen very practical subjects. In addition to the distinguished guests, the program includes seventy-two lecturers selected from local members of the Society, all of whom have teaching ability and practical experience in their particular subjects.

The officers and members of the Oklahoma City Clinical Society, being cognizant that the rapid development of new facts and theories in the field of medicine necessitates frequent post-graduate instruction for those who would progress, have arranged in this course a four-day period of very intensive instruction at a most nominal expenditure of time and money for those who attend. Those of us who have attended this conference in the past have been impressed with the precision in which the program is carried on, the diversity of it, the practical experience gained from the lecturers and our direct association with them, and the whole-hearted hospitality accorded all visitors. We feel that the stimulation received from attending these meetings always tends to bring the profession into a closer understanding of its problems and into a closer fellowship as members of our great profession.

JUSTICE DEPARTMENT APPEALS DIRECT TO THE SUPREME COURT

Journal Says It Seeks to Avoid a Decision by the U. S. Circuit Court of Appeals on A.M.A. Indictment Dismissal

"According to announcements appearing first in the press, the United States Department of Justice has filed in the United States Supreme Court a petition for a review of the decision of Justice Proctor of the United States District Court for the District of Columbia, dismissing the indictment of the American Medical Association and three other medical organizations and certain individual physicians under the Sherman Antitrust Act," The Journal of the Association for Sept. 16 says in an editorial.

"The department seeks in this way to avoid a decision by the United States Circuit Court of Appeals for the District of Columbia, to which an appeal would ordinarily lie and to which the department had already appealed. The department seeks to justify this course on the ground that Justice Proctor's decision would ultimately reach the United States Supreme Court for review, no matter how the Circuit Court of Appeals might decide, and that the case would therefore be speeded and the public benefited by ignoring that court. This line of reasoning, if generally accepted, might relieve all United States circuit courts of appeal of a substantial part of their present work. Moreover, if the Supreme Court refuses to entertain jurisdiction, the actual settlement of the case may be retarded.

"A decision in the present stage of this case by either the Supreme Court of the United States or by the United States Circuit Court of Appeals must necessarily be limited to questions of law and will not determine in any degree the truth or falsity of the charges against the American Medical Association and others, formulated in the recently dismissed indictment."

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

PHYSICIAN'S RELATIONSHIP TO THE PATIENT

HAVING noticed that patients who were not receiving collapse surgery left the sanatorium prematurely (signed a release) with far greater frequency than those who did receive collapse, Dr. Kruger of the Hudson County Tuberculosis Hospital attempted to find the reasons for their apparent dissatisfaction. And with a knowledge that a goodly number of patients who sign a release return to the sanatorium later with their lesions much more advanced in extent, he attempted to create a better understanding of every patient so that they would be less inclined to leave the sanatorium before they should.

Three reasons account for the self-discharge of patients not receiving collapse surgery: (1) a feeling of well-being, (2) conditions at home requiring their return to work, (3) the patient not sufficiently aware of the importance of bed rest in the treatment of tuberculosis and not educated properly as to the advantages of the sanatorium or hospital.

Many patients admitted to the sanatorium are not acutely ill and except for a slight cough or a sudden hemoptysis were not aware that they were ill. Mass tuberculin testing has discovered many cases of tuberculosis that are entirely asymptomatic. The news is generally received with some degree of shock, especially by those who think of tuberculosis as "consumption" and who are not aware of what can be done therapeutically. The way a person reacts to the knowledge that he has tuberculosis and will have to remain in a sanatorium for a long time depends on two factors: (1) his inherent characteristics, whether his tendency is toward an introvert or extrovert type, and (2) his station in life at the moment and his responsibilities, such as the support of a family.

Emotional Types

Extroversion may be defined as the turning of an interest outward toward some object. Introversion is the contemplation of one's own thoughts and feelings. Tuberculous patients can hardly be rigidly classified into these two groups but in each individual is the tendency to lean toward one or the other and when an individual

develops tuberculosis that tendency becomes more manifest. Theneurasthenic manifestations encountered in tuberculous patients are not specific but are frequently seen in individuals with any protracted illness. The physician dealing with tuberculous patients must adjust and adapt them to their illness as close to the point of contentment as is possible, instilling within them the hope and certainty that they will soon recover and return to their former usefulness to society. The patient confined to a bed-rest regimen for a number of months must be made to believe in the need for such treatment.

The extrovert is characteristically carefree and unconcerned about his condition. The problem that confronts the physicians is to gain the confidence of this patient and to explain the need for prolonged treatment if he is to make satisfactory progress. Occasionally one will encounter a patient who does not adequately appreciate the necessity of intensive treatment. Here one must be frankly outspoken and attempt to show what may happen if he fails to heed the physician's advice. The patient must be made to realize that he is a sick person in spite of his apparent well-being. He must be convinced of the fact that tuberculosis, when discovered early, may be easily controlled, whereas, when the disease is of a more advanced type, it is more difficult to obtain a satisfactory result. In order to obtain the full cooperation of the patient, it is essential that he be advised concerning the development and progress of the disease through the medium of education. The physician in

charge must make an indelible impression on his patient.

It is with the introvert that we must use the greatest discretion. He has kept his troubles to himself, for his best defense has been to keep his troubles hidden. It is this type of individual that should be prevailed upon to share his innermost thoughts with the physician. He must not be allowed to become depressed, for a happy patient with a happy, healthy state of mind is a most desirable asset in fighting a chronic disease such as tuberculosis. On the other hand, the practice of minimizing a patient's lesion, such as diagnosing an infiltrate as a "bronchitis" so as to avoid any "embarrassment" to the patient, is to be condemned. Too often patients are seen who state that their physician, several months prior to admission, told them that they had a "little bronchitis" or a "tiny spot on the lung" and advised only a couple of weeks' rest in bed. However, in a certain few select cases it may be perfectly justifiable to minimize somewhat the extent of the process. Those patients who are apprehensive and worried about themselves must be reassured and convinced that their trouble is not too far advanced and that with time they will recover. An attitude of optimism must be assumed by the doctor and imbued in the patient. The mere mention of the word "cavity" may cause them to become panicky and apprehensive.

Winning Confidence

When making staff rounds it is best not to discuss the case in front of the patient, except in the form of encouragement. The patient will listen intently and will invariably misinterpret every statement. The physician should devote as much time as possible to obtaining a sympathetic understanding with the patient and discuss at length any problem that may be brought up, no matter how trivial it may seem. He should be encouraged to keep interested in the news of the day. The widespread use of the radio is endorsed; its effects on the well-being of the patients have been so encouraging that in the new Hudson County Tuberculosis Hospital, every bed is supplied with an individual ear-set, so that a patient may have the choice of listening to one of four different programs without in any way interfering with the other patients in the ward.

When pneumothorax is attempted and fails, the patient will become despondent, feeling that

his only hope for recovery is lost. To obviate this apparent setback one must explain that pneumothorax is merely an adjunct in the treatment; that the patient will improve with bed rest alone, but that if pneumothorax is successful it will help rest the lung a little more and tend to hasten recovery.

One has to contend with patients wanting to be discharged because they feel they can continue bed rest at home. This is not true. The majority of those who sign a release become careless and soon have to return because of reactivation of the lesion. With this group the physician must stress the dangers involved, frankly and outspokenly. Citing as an instance an individual, known to the patient, who having refused advice has had to return with an advanced lesion, often helps him to comprehend the significance of his intentions.

What Rest Means

One thing must be emphasized to all tuberculous patients, that rest means not only physical rest but also mental rest. The object of physical rest is to diminish the work of the lungs by diminishing the number and extent of the respiratory excursions. Yet, what good is such physical rest if the patient maintains a state of high nervous tension as seen in the neurasthenic type of individual? It is not infrequently noted that patients with extensive pulmonary involvement who are cheerful and mentally stable show a favorable progress.

The tuberculous person must be shielded from the cares and responsibilities of home and business. Friends and members of the family must be cautioned against bringing any news to the patient which may in any way disturb him. For that reason, sanatorium care for the patient is the desirable thing, whenever feasible, for here the individual is more or less isolated from home influences, which, although well meant, are not always to the patient's best interests and, in addition, he is under constant supervision with the knowledge that he is in the same hospital with a number of others similarly afflicted and all having the same goal. Also, from a public health standpoint, his chances of spreading his infection are minimized.

THE JOURNAL
OF THE
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W. R. BROOKSHER, M. D., Editor
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EDITORIALS

The Postgraduate Study Course

The Committee on Postgraduate Study of the Society announces the seventh course to be held at the University of Arkansas School of Medicine, Little Rock, October 10th and 11th. This Committee has presented programs of a uniform high standard of excellence in the past; the present program certainly offers to equal, if not exceed, the previous six two-day sessions. In a study conducted by the American Medical Association during 1938, the caliber of programs presented by the Arkansas Medical Society received due praise. However, there was criticism of the regrettably small attendance. Organized medicine has seen its duty in the education and re-education of its membership and generally speaking is performing a good job. The individual physician has not grasped the full value of postgraduate study. Far too many members of this Society fail to take advantage of these opportunities to refresh their knowledge of old procedures while acquiring the newer technics. The

Committee on Postgraduate Study will take your attendance at the coming session as evidence of your appreciation for their efforts. The Journal hopes that well over two hundred and fifty are present for this seventh course. The full program, copies of which will later be mailed to all members, follows:

TUESDAY, OCTOBER 10, 1939

9:00- 9:45	REGISTRATION
9:45-10:00	Calling the Meeting to Order —Dr. D. A. Rhinehart, Chairman
10:00-10:30	Chronic Nontuberculous Infections of the Respiratory Tract. (Lantern Slides) —Dr. B. P. Briggs
10:30-11:15	After Urinary Antiseptics; What About Kidney Infections? (Lantern Slides) —Dr. R. Lee Hoffman
11:15-12:00	The Diagnosis and Treatment of Meningitis —Dr. Paul F. Stookey
12:15- 1:45	LUNCHEON—Albert Pike Hotel
2:00- 2:30	The Role of the Internist in the Care of Patients With Thyroid Disease. —Dr. O. C. Melson
2:30- 3:10	The Surgical Treatment of Hyperthyroidism. (Colored Motion Picture and Colored Lantern Slides) —Dr. G. V. Lewis and Dr. Carl E. Rosenbaum
3:10- 3:25	Roentgen Irradiation in the Treatment of Toxic Goitre..... Dr. W. R. Brooksher, Jr.
3:25- 4:10	Occlusal Disease of the Peripheral Arteries —Dr. E. V. Allen
4:10- 4:55	Clinical Indications of Anterior Pituitary-like Sex Hormone.....Dr. Robert L. Schaefer
4:55	Meeting of Committee on Postgraduate Instruction

TUESDAY EVENING, OCTOBER 10, 1939

7:30- 8:00	The Medical School in a Program of Graduate Medical Instruction —Dr. Stuart P. Cromer, Dean
8:00	A Classification of the Arthritides; A Clinical Demonstration.Dr. Paul Williams

WEDNESDAY, OCTOBER 11, 1939

9:30-10:00	Appendicitis: Errors in Management and Educational Needs..... Dr. J. K. Donaldson
10:00-10:30	A Dentist Talks to His Physician Friends (Lantern Slides) —Dr. W. E. Hutchison, D.D.S.
10:30-11:00	The Effects of Drugs in the Nose (Motion Picture) —Dr. Paul L. Mahoney and Dr. John Agar
11:00-11:45	Urgency, Dysuria, and Incontinence in the Female..... Dr. R. Lee Hoffman
12:15- 1:45	LUNCHEON—Albert Pike Hotel
2:00- 2:45	Staphylococcic Infections (Lantern Slides) —Dr. Paul F. Stookey
2:45- 3:30	Clinical Indications of the Estrogenic Hormone Dr. Robert L. Schaefer
3:30- 4:15	Hypertension..... Dr. E. V. Allen

OBITUARY

MILTON AUGUSTUS HARDIN, age 61, died at his home in Norphlet September 4th. A graduate of the Saint Louis College of Physicians and Surgeons in 1907, he first practiced at Bauxite but had been located at Norphlet since 1920. Surviving relatives are his wife and three daughters.

FRED RAINES MORROW, age 68 years, died at his home in Fayetteville August 15th from a heart attack. Born in Dallas May 31, 1871, he came the same year to Arkansas with his parents and received his education in the state. In addition to attendance at the University of Arkansas, he attended the Memphis Hospital Medical College, from which he graduated in 1900. He entered into practice at Green Forest until he entered the army medical corps during the world war. Subsequent to discharge he had practiced in Fayetteville. He was married February 17th, 1909, to Miss Irene Redding, who, with a daughter, survives him. At the time of his death he was a member of the Washington County and of the Arkansas Medical Societies, of the Southern Medical Association, a fellow of the American Medical Association, a staff member of the City Hospital, Fayetteville, and a past post surgeon of the Fayetteville post of the American Legion.

JOHN H. COLAY, aged 58 years, died at his home in Morrilton August 16th from injuries suffered when he fell down an elevator shaft. Born in Alabama August 26th, 1880, he came to Conway County with parents and graduated from the University of Arkansas School of Medicine in 1911, first practicing at Cleveland, moving to Morrilton in 1935. He was a member of the Conway County Medical Society and of the Arkansas Medical Society. Surviving relatives are his wife, a daughter and a son.

RADIO BECOMES AN ALLY

The constant fight of organized medicine in the interests of the public health and general welfare over these many years has been materially aided by the code for the self-regulation of advertising recently adopted by the National Association of Broadcasters. Provisions of the code bar the advertising of:

1. Any remedy or product the sale of which or the method of sale of which constitutes a violation of law.
2. Cures and products claiming to cure.
3. Continuity which describes repellently any functions or symptomatic results of disturbances or relief granted such disturbances through the use of any product.

This manifest intention upon the part of the radio industry to have nothing to do with fraudulent exploiters of "cures" and "quackery" is indeed appreciated cooperation in medicine's fight to eradicate these evils.

BOOK REVIEWS

An Introduction to Sociology and Social Problems: By Deborah MacLurg Jensen, R. N., B. Sc., Social Service Consultant to the Visiting Nurse Association, Saint Louis; Lecturer in Nursing Education, Washington University, Saint Louis. Pp. 341. Price \$2.75. Saint Louis: C. V. Mosby Company, 1939.

The author has written a most readable text on the subject and we feel that this should be in the library of every training school. Typographically, this is a credit to the publisher.

Chronic Diseases of the Abdomen: By C. Jennings Marshall, M. S., M. D. (Lond.), F. R. C. S. (Eng.); Surgeon, Charing Cross Hospital and Victoria Hospital for Children; Surgical Consultant, L. C. C. and Bromley District Hospital; Examiner in Surgery, London University and Victoria University, Manchester. 131 illustrations. Price \$6.00. Boston: Little, Brown and Co., 1939.

From a wide personal experience the author has gathered the material for this most interesting monograph. Differential diagnosis is stressed by those points which have been found practical in clinical use. The book gives concisely the details of chronic abdominal disease without detracting from its readable style. We have found this a most excellent work.

Cancer of the Breast and Cancer of the Uterus. By Marion Ellsworth Anderson, A. B., M. D., Clinton, Iowa. Pp. 106. Second Edition. Clinton, Iowa: The Franklin Press, 1939.

The author has added material and illustrations to his handy compact volume. Written especially for the general practitioner, the book accomplishes its purpose adequately.

PROCEEDINGS OF SOCIETIES

The Lawrence County Medical Society was addressed August 8th by E. J. Cruse, Black Rock, on "Tetanus" and C. C. Ball, Ravenden, on "Poliomyelitis." Judge C. W. Webb discussed the county hospital problem.

T. C. Guthrie, Secretary.

The Faulkner County Medical Society were the guests of the Conway Memorial Hospital for luncheon during August. It is planned to make this a monthly affair.

The Central Committee for lowering the mortality rate of appendicitis in Arkansas met at the Arlington Hotel, Hot Springs, August 17, 1939.

It was agreed that a sub-committee in each Councilor District of the Arkansas Medical Society should select a speaker in that district. This sub-committee is to be composed of the District Councilor, one member of the Central Committee and a third member selected by the first two.

It was agreed that when the subjects and information arrive from the Southern Medical Association, it should be delivered to Dr. W. T. Wooton of Hot Springs, Chairman of the Public Relations Committee, and he in turn should forward it to the Secretary of the Arkansas Medical Society for release to the sixty-five newspapers which have been publishing articles furnished by the Arkansas Medical Society.

It was agreed that Apendicitis Week should be proclaimed in order to give this campaign as much publicity as possible, but the date for this period has not yet been agreed on.

It was decided that this publicity should be disseminated through newspapers, public speakers and moving pictures to schools, Parent-Teacher Associations, civic organizations and the public in general.

Dr. Cromer, as Chairman of the Movie Publicity Committee, was instructed to contact the American Medical Association, the American College of Surgeons and the Metropolitan Life Insurance Company and to ascertain whether moving pictures in line with the campaign's purpose can be obtained.

The Garland County Medical Society sponsored an exhibit at the American Congress of

Physical Therapy, New York, during September, on the hydrotherapeutic procedures at Hot Springs National Park. Euclid M. Smith, Hot Springs National Park, read a paper before the Congress on "Spa Therapy in the Treatment of Rheumatic Disorders."

The Clinical Society of Bone and Joint Surgeons will meet in Little Rock October 14th as the guests of F. Walter Carruthers. Sessions will be held in the Amphitheater of the University of Arkansas School of Medicine.

The Jefferson County Medical Society met September 5th at the Davis Hospital, Pine Bluff, to hear J. K. Donaldson, Little Rock, discuss "The Aims and Objects of the Committee on Appendiceal Mortality of the Southern Medical Association." Dr. Donaldson also presented an illustrated paper on "Diagnosis and Surgery of Carcinoma of the Lung."

The Ouachita County Medical Society met in regular monthly session at the Camden Hospital September 7th. A banquet preceded the following scientific program:

"Some Problems in Cardiology," J. E. Knighton, Jr., Shreveport, "Partial Gastrectomy" J. C. Willis, Jr., and W. J. Taylor, Shreveport, and "Treatment of Bursitis," Oscar O. Jones, Shreveport.

The Fifth Councilor District Medical Society will hold an extraordinary session at Camden October 5th. The day's program will begin with the luncheon and business meeting of the Council of the Arkansas Medical Society and the various Committee Chairmen of the Society. The scientific session will be held at four o'clock, the following speakers being heard: Wm. Hibbitts, Texarkana, "A Brief Review of Intestinal Obstruction"; B. B. Barber, President, Louisiana State Medical Society, "Latent Scurvy," and C. W. Mayo, Rochester, "Surgery of the Right Colon." The annual banquet session will be held at 6:30 P. M., and the public session will follow in the municipal auditorium, where L. H. Reeves, President, State Medical Association of Texas, and C. W. Mayo, will speak. Other speakers at the banquet session will be Senator Miller, Governor Bailey and Congressman Kitchens.

PERSONALS AND NEWS ITEMS

Dr. and Mrs. F. O. Rogers, Little Rock, spent an August vacation in North Carolina.

Dr. and Mrs. Robert Caldwell, Little Rock, spent an August vacation on the west coast.

The following were selected as "Our Leading Citizen" in the respective communities and attended the world premiere of the motion picture, "Our Leading Citizen" in Fort Smith-Van Buren, August 7th: J. B. Jameson, Camden; L. M. Lile, Hope, and A. M. Elton, Newport.

Dr. and Mrs. Val Parmley, Little Rock, spent an August vacation in Mexico.

Capt. P. E. Thomas, Little Rock, attended the annual encampment of the 154th Observation Squadron, Arkansas National Guard, at Fort Sill, Oklahoma, in August.

Dr. and Mrs. Alfred Hathcock, Fayetteville, spent a recent vacation in Batesville.

Dr. and Mrs. M. E. Foster, Fort Smith, spent an August vacation in Colorado.

J. B. Askew, Batesville, and Kirk Mosley, Texarkana, are taking public health work at Harvard University.

S. W. Chambers has resigned as district health officer at Harrison and located for practice at Mountain Home.

Dr. and Mrs. P. W. Lutterloh, Jonesboro, toured northern and eastern points in August.

E. L. Handley, Pocahontas, suffered a fractured leg during August.

Dr. and Mrs. Earle Hunt, Clarksville, spent an August vacation in Colorado.

The following attended the annual field training period of the 206th Coast Artillery (A-a), Arkansas National Guard, at Fort Barrancas, Florida, in August: Major W. R. Brooksher, Fort Smith; Captain Stanley M. Gates, Monticello, and Captain N. C. Hodge, Marianna.

Drs. H. K. Carrington and J. H. Wilson have opened their new clinic building at Magnolia.

A. S. Buchanan, Prescott, and Ralph M. Sloan, Jonesboro, have been appointed members of the Medical Examiners' Board of the Arkansas Teachers Retirement System. W. B. Grayson, Little Rock, is chairman of the board.

G. W. Reagan, Little Rock, has been appointed Lieutenant-Commander in the United States Naval Reserve and has been assigned as urologist to Hospital Unit No. 2.

R. B. Robins, Camden, took special work in proctology during August in Chicago.

S. F. Hoge, Little Rock, recently addressed the Veterans of Foreign Wars on "How to Live to the Middle Forties and After."

F. W. Carruthers, Little Rock, spent a recent vacation at Carlsbad Caverns.

N. C. Hodge, Marianna, has been promoted to Captain, Medical Corps, Arkansas National Guard.

K. K. Kimberlin, Tuckerman, spent an August vacation in Detroit.

Dr. and Mrs. R. O. Norris, Tuckerman, spent an August vacation in Missouri.

Dr. and Mrs. R. T. Cook, Little Rock, spent an August vacation on the Great Lakes.

E. H. White, Little Rock, has been appointed Professor of Obstetrics and Gynecology in the University of Arkansas School of Medicine. Dr. White will head the department.

L. L. Fatherree, Little Rock, recently addressed the Chamber of Commerce on "The Health Problems of Little Rock."

C. R. Henry, Little Rock, has been appointed Professor of Obstetrics and Gynecology in the University of Arkansas School of Medicine.

O. K. Hukill has moved from Hot Springs National Park to Walnut Ridge.

Hoyt R. Allen, Little Rock, attended the recent meeting of the American Proctologic Society in New York.

G. S. Self has been elected a director of the Paragould Chamber of Commerce.

J. L. Merrell and J. C. Land have been elected vice-commander and surgeon, respectively, of the Walnut Ridge post of the American Legion.

Dr. and Mrs. Dewell Gann, Sr., Benton, celebrated their fiftieth wedding anniversary September 4th.

BORN—A son, to Dr. and Mrs. R. D. Dickins of Monticello, on August 13th.

Dr. and Mrs. H. C. Dorsey, Fort Smith, spent an August vacation in Mississippi.

D. K. McCurry, Green Forest, has been elected secretary of the Carroll County Medical Society.

"Some Common Errors in the Diagnosis and Treatment of Chest Problems," by J. K. Donaldson, Little Rock, appeared in the August American Journal of Surgery.

A. A. Hughes has moved from Pine Bluff to Houston, Texas.

Ira W. Ellis, Monette, received treatment at the Army and Navy General Hospital, Hot Springs National Park, during August.

"Management of Urinary Infections" by H. Fay H. Jones, Little Rock, appeared in the August Tri-State Medical Journal.

"Orthopedic Care of Convalescent Poliomyelitis: Report of 63 Cases One Year Following Acute Onset," by Vernon Newman, Little Rock, appeared in the September Southern Medical Journal.

MARRIED—On September 10th, John T. Heron, Hamburg, and Miss Katherine Eugenia Smith, of Warren.

BORN—a son, on September 4th, to Dr. and Mrs. Warren Riley, El Dorado.

"Combined Use of Chemotherapy and Artificial Fever in Neurosyphilis" by Frank M. Adams, Hot Springs National Park, which originally appeared in the February issue of The Journal of the Arkansas Medical Society, was abstracted in the August issue of Archives of Physical Therapy.

F. A. Hughes, Prescott, has been elected a Fellow of the American College of Surgeons.

B. J. Reaves, Little Rock, attended the American Congress on Obstetrics in September.

J. J. Monfort has been elected president of the Batesville Kiwanis Club.

J. L. Aday, Little Rock, took postgraduate work at the Mayo Clinic in September.

N. T. Hollis, Little Rock, has been appointed Lieutenant, Naval Reserve, and assigned to Hospital Unit No. 2 as neuro-psychiatrist.

TULANE UNIVERSITY OF LOUISIANA SCHOOL OF MEDICINE

CLINICS:

During the week October 23 to 28, 1939, will be given daily. Registration \$5.00.

For program and other information, write

DIRECTOR OF GRADUATE MEDICAL STUDIES

1430 Tulane Avenue

New Orleans, La.

RANDOM THOUGHTS OF THE SECRETARY

August 4th. At the civic club today, representatives of the radio and movie confidentially let us in on the reason why Irvin S. Cobb will be unable to attend the world premiere of "Our Leading Citizen." It seems that Cobb's illness is much more serious than the papers have stated, it being desired to withhold this from Mrs. Cobb. Being somewhat cynical of movie and radio publicity, we find it difficult to reconcile this with last night's press story that Cobb had been discharged from the hospital.

August 6th. By rail today for the conference of regimental officers on the war at Fort Barrancas. In the spirit of the day we occupy ourself one way with a theoretical battle on that famed correspondence course battlefield, Gettysburg, disposing of medical troops in a manner which is satisfactory to us, but which we are sure will not meet with the approval of the instructor. Returning, we read with interest in Rhinehart's Gastro-intestinal Dysfunction, wherein Barton has exhaustively reviewed the literature on a malady which is far more common than is generally supposed, a more full understanding of which would bring relief to many a suffering patient and redound to the credit of the physician.

August 7th. The town goes Hollywood in the accepted manner for the world premiere of "Our Leading Citizen," Bob Burns and his co-stars being augmented by the personal appearances of "Our Leading Citizen" from Camden and Hope, J. B. Jameson and L. M. Lile, neither of whom steps down from this bit of glory to call on us. Hope's famous watermelons put Lile in the press photos of the day. From the day's impressions we retain lasting memory of "What it means to live in a small town" by the Van Buren editor, Hugh Park, and from the kick we got out of hearing Bill Slates, the local radio announcer, sign off, saying: "This is the Columbia Broadcasting System."

August 18th. Trekking southeast across the state finding Tate an early riser at Russellville. At McGehee we take time out for lunch and present flowers to President-Elect Smith for true hospitality to us and family, his office being a haven of comfort whilst we endeavor to straighten out the matter of one station wagon lost in action. Thence onward to reach the Mississippi capital at dusk where, proper interval having failed to furnish us with a tent and cot at the bivouac ground, we make ours an air-conditioned camp at the Heidelberg Hotel.

August 19th. With no excuse other than to tell us that he will remain at Jackson as medical officer for one battery, Gates phones our luxurious camp site at 5:30 A. M., thus starting off camp life for us according to regulations. With rain all the way the convoy proceeds in good form to Gulfport, distinguished in the memory of this regiment by the gigantic mosquitoes which inhabit the area.

August 20th. Becoming casually acquainted with the "dry" gulf coast of Mississippi en route, Fort Barrancas, revived beyond all recognition is finally reached and quarters for the coming two weeks selected well in advance of the regiment which follows.

August 22nd. Camp life having become somewhat of a routine, we join the gun battalion on Santa Rosa island,

taking position with the safety officer on his elevated pinnacle to better watch gun fire.

August 27th. The officers go deep-sea fishing with varying luck, Hodges becoming grounded for the occasion by mal de mer.

August 28th. War talk becomes the day's headlines—regrettable indeed that one lone man, undoubtedly of pathological mind, can plunge millions into slaughter.

August 31st. Camp's brightest day—pay call sounds and all happiness abounds.

September 1st. Taking departure of the post, cruising independently toward Jackson, not so certain of this lone venture when the fan belt breaks twenty miles east of Mobile and no help to be expected. This difficulty overcome as is the subsequent worry over a loose wheel, this latter enlivened by the encounter with the cycling Britons who felt that the matter of a whole column of soldiers throwing apple cores at them was "laying it on a bit thick."

September 2nd. In the early morn we know that war is finally declared. How vitally important is it now that we Americans keep both feet on the ground, be alert for artful propaganda and strive in every way to avoid ultimate participation in what promises to be a most horrible conflict. Discerning immediately that this nation, peace-loving as it seems on the surface, is already cultivating the spirit of war by vigorous moral support of one group of belligerents. Needs but more fanning of these thoughts, the provision of a few atrocities, the torpedoing of a few ships carrying Americans, and the preliminary steps toward our entrance will have been firmly established.

September 5th. Much afraid that the European situation will develop a national case of jitters as most everyone is so intent upon the words from the radio commentator. A few days of this war have already convinced us that there is but slight occasion for constant attendance upon radio bulletins, nor does the press deserve our cautious study. What comes out of Europe is obviously only what it is meant for us as Americans to hear, a bedlam of denials and counteraccusations, leaving us no solace as we attempt to properly reconstruct the story in our own minds. We resolve that we shall read the war news but once each week and that in TIME.

September 7th. The propaganda battle waxes warmer with each day and it becomes proper that we, as individual Americans, make a most sincere effort to analyze the stories from abroad. As it now stands, we may expect to have our sympathies aroused, our hate fomented, to feel emotions that are unlike our true selves. The radio voice is most insidious, carries the hypnotic influence of apparent authority, and permits no talking back or interrogatories. It is well that we doubt that our opinions are "our very own" and earnestly strive to evaluate our own propaganda. Let us search for facts before we reach conclusions. Fortunately, there is ample time for this.

September 10th. Avoiding the heat we week-end for the last time this season at Lake Weddington, observing Jimmie Lewis, with total regard for actinic rays, sunning himself the morning long on the beach and the raft, the while we exercise a bit of caution which experience has taught us is advisable. Noting by the papers that the Governor decrees that Arkansas will observe Thanksgiving on the 30th, which meets with our approval, should that opinion be of any value to Carl Bailey.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Mrs. C. E. Kitchens addressed the DeQueen Rotary Club, August 4th on "City Beautification."

The Auxiliary is fortunate to have Mrs. S. J. Wolfermann, Fort Smith, serve as Chairman of the Cancer Control Committee. Because of ill health, Mrs. B. A. Rhinehart, Little Rock, was forced to resign this office.

"If we are to inform others, we must first inform ourselves," is the theme which the National Program Committee of the Auxiliary to the American Medical Association has suggested for the 1939-1940 Auxiliary year. The Chairman of Education and Public Health wishes all members of the Auxiliary to the Arkansas Medical Society to consider this theme a challenge to our responsibilities as citizens of Arkansas and as wives of medical men. In these uncertain times, when efficient, responsible leadership is necessary for the proper functioning of all organizations, it is particularly desirable that we take the lead in the study of the problems which affect the interests of the medical profession and which tend to jeopardize the public health.

The National Program Committee suggests the following topics for study:

1. How may an Auxiliary best extend its influence and support the aims of the disease control committees of the medical society?
2. Socialized medicine.
3. Animal experimentation.
4. Medical history and progress.
5. History of the development of local and state public health work.

Reference materials for study of the above topics may be secured from the Bureau of Health Education, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

The program incorporates:

1. An active campaign to increase the sale and distribution of the publication, Hygeia.
2. An active year's work in public relations.
3. The development of an alert, interested legislative committee, ready to act on advice from the medical society, on any health legislation that enlists the active interest of the organized medical profession.
4. A constant effort to keep before the general public, as well as Auxiliary members, the regular radio program, "Your Health," sponsored by the American Medical Association.
5. The encouragement of a broader use of the instructive pamphlet publications of the American Medical Association.
6. The organization of the year's work to include meetings of a social nature.
7. The suggestion to solicit space in county and state medical society periodicals, in which all meetings, as well as other Auxiliary activities, will be faithfully reported.

These suggestions from the National Committee for a planned program should be valuable to Auxiliaries desir-

ing to publish a yearbook in advance of the Board Meeting in September. The Committee on Education and Public Health will have further suggestions after this meeting and will make this information immediately available.

MRS. CHARLES H. LUTTERLOH,
Chairman, Education and Public Health,
Hot Springs National Park.

The Independence County Medical Auxiliary members were hostesses to the county medical society at a picnic supper tendered in the lovely courtyard and garden at the home of Dr. and Mrs. O. J. T. Johnston.

Supper was served from a long table picnic style and the guests were seated at smaller tables. Garden flowers in vases and baskets and the brilliant illumination of the outdoor lights made the courtyard a most attractive setting for the party.

Those present in addition to Dr. and Mrs. Johnston were: Dr. and Mrs. L. M. Huskey of Cave City; Dr. E. M. Gray of Mountain Home; Dr. V. D. McAdams of Cord; Dr. H. Lee Fuller of Little Rock; Dr. and Mrs. J. B. Askew, Dr. and Mrs. Calvin Churchill, Dr. and Mrs. M. S. Craig, Dr. and Mrs. J. J. Monfort, Dr. C. G. Hinkle, Mrs. L. T. Evans, Mrs. R. S. Dorr and Dr. Finis Q. Wyatt. Mr. and Mrs. Edwin Katterjohn and son Joe Johnston of Russellville, Ky., were guests for the evening.

Following the supper the auxiliary members enjoyed a social hour in the courtyard, and the medical society members adjourned to the spacious porch of the Johnston for a scientific program.

The Washington County Auxiliary postponed the July meetings because so many were away on vacation. The Auxiliary met with the doctors for a picnic at Bentonville with the Benton County Medical Society and Auxiliary.

GOLF, AND INFANT FEEDING

It is possible to play over the entire course with a single club and bring in a fair score. But playing with only one club is a handicap. The best scores are made when the player carefully studies each shot, determining in advance how he is going to make it, then selects from his bag the particular club best adapted to execute that shot.

For many years, Mead Johnson & Company have offered "matched clubs," so to speak, best adapted to meet the individual requirements of the individual baby.

We believe this a more intelligent and helpful service than to attempt to make one "baby food" to which the baby must be adapted.

BOOK REVIEWS

The Art of Anesthesia: By Paluel J. Flagg, M. D., Visiting Anesthetist to Manhattan Eye and Ear Hospital; Consulting Anesthetist to Saint Vincent's Hospital, New York, etc. Sixth edition. Pp. 491. One hundred sixty-one illustrations. Philadelphia: J. B. Lippincott Company, 1939.

This revised book, which contains 480 pages and 161 illustrations, presents every standard accepted anaesthetic of present day anaesthesia, with step by step technic, plus excellent illustrations. The author, with 25 years' experience, intends this book, as he did the first, "as a groundwork upon which the student, interne and general practitioner may acquire a more comprehensive knowledge of the Art of Anaesthesia." The author's account of different types of anaesthetics in use today with the technic of their administration makes this an excellent book for one skilled in giving anaesthetics. At the same time, it is well written and arranged so that the student of anaesthesia will get much beneficial information from its contents.

Manual of the Diseases of the Eye: By Charles H. May, M. D., Consulting Ophthalmologist to Bellevue, Mt. Sinai and French Hospitals, New York, with the assistance of Chas. A. Perera, M. D., Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department of Columbia University, New York. Pp. 515. Sixteenth edition. Price, \$4.00. Baltimore: William Wood and Company, 1939.

This manual is the guide and teacher for the medical student and general practitioner and often serves as a ready reference for the ophthalmologist.

The contents with regards to symptoms, diagnosis and treatment are, as always, practical and dependable. The numerous colored plates throughout the book are authentic and details as to color and general make-up cannot be improved upon.

The chapter on Compensation for Eye Injuries is especially useful in the ever-increasing number of accidents to the eye in the industrial field.

The make-up and contents of the book of which this is the sixteenth edition have not deteriorated but have improved as evidenced by the popularity of this book.

It should be in the hands of every medical student and every graduate physician.

Functional Disorders of the Foot: By Frank D. Dickson, M. D., Orthopedic Surgeon, Saint Luke's, Kansas City General and Wheatley Hospitals, Kansas City, Missouri, and Providence Hospital, Kansas City, Kansas, and Rex L. Dively, M. D., Orthopedic Surgeon, Kansas City General and Wheatley Hospitals, Kansas City, Missouri, and Providence Hospital, Kansas City, Kansas. Pp. 305. Two hundred and two illustrations. Price, \$5.00. Philadelphia: J. B. Lippincott Company, 1939.

It may truthfully be said that ten million people are walking the streets today complaining with disorders of the feet, yet, the medical profession generally has been content to leave the treatment of their conditions to non-medical workers. This book is devoted entirely to the diagnosis and treatment of functional disorders. The evolution, pertinent anatomy and physiology of the foot are briefly but adequately discussed. Foot imbalance, its diagnosis and treatment, is simply and effectively covered under the three divisions of life in which this

condition exists, namely; (1) Childhood, (2) Adolescence, and (3) Adult. The conservative methods of treatment are discussed but all accepted operative procedures together with their indications are adequately explained and illustrated. A chapter is devoted to proper foot apparel. The treatment of bunions, hallux valgus, hammer toes, corns, callouses and affections of the nails is well described. The authors conclude with a most valuable chapter on strapping of the foot and ankle and give a well illustrated series of foot exercises. The book is fully illustrated with drawings, X-rays, and photographs.

Otolaryngology in General Practice: By Lyman G. Richards, M. D., Fellow in Otology, Courses for Graduates, and Assistant in Surgery, Harvard Medical School, Associate Professor of Otolaryngology, Tufts Medical School, Research Associate in Otolaryngology, Children's Hospital, Otolaryngological Surgeon, Peter Bent Brigham Hospital, Boston, Massachusetts. Pp. 352. Illustrated. Price, \$6.00. New York: The Macmillan Company, 1939.

As the title indicates, this book is intended for the busy general practitioner, who has neither the time nor the need to read an exhaustive text prepared for the specialist in ear, nose and throat work. The text is clear, concise and readable. It deals with the usual diseases that the physician may be called upon to diagnose and treat or refer to the specialist, as the occasion may demand. Appropriately, the author indicates, that due to a wider range of knowledge, the general practitioner is in a more strategical position to discover the causes and evaluate the symptoms than the specialist, whose field of operation must of necessity be limited. This volume should be of interest to the specialist and an asset to the library of any general practitioner.

Proctology for the General Practitioner: By Frederick C. Smith, M. D., M. Sc., (Med.), F. A. P. S. Proctologist to St. Luke's and Children's Hospital, Philadelphia; formerly Associate in Proctology, Graduate School of Medicine, University of Pennsylvania. Pp. 385. 142 illustrations. Philadelphia: F. A. Davis Company, Publishers, 1939.

This is an excellent treatise on rectal diseases for a man in general practice. The text is clear and concise and the illustrations are exceptionally good. In this day and time when the general practitioner is called on more and more to do proctology or at least to be able to give a correct diagnosis, then it behooves him to have at hand some text book which he can rapidly consult. This text will adequately furnish the necessary reference.

Treatment in General Practice. 88 contributors. Two volumes. Price \$7.50. Boston: Little, Brown and Company, 1939.

After a careful perusal of this interesting and informative work on therapy in general practice your reviewer has been left with two very definite impressions. The first is that, in general, the English school is far better informed concerning the intricacies of materia medica and therapeutics than we are in these United States; or to put it conversely, the physicians in this country are relatively poorly equipped when it comes to the point of making use of their knowledge of materia medica. The second impression is that the English are still employing certain drugs very successfully that we over here have long since discarded as being obsolete.

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POSTOPERATIVE CARE OF THE AVERAGE PATIENT FOLLOWING ABDOMINAL OPERATION*

GEORGE V. LEWIS, M. D.
Little Rock

It is an old axiom that the amount of postoperative treatment required is inversely proportionate to the amount of preoperative preparation. Both the preoperative preparation and the postoperative treatment of the average patient following abdominal operation should be directed toward the prevention of the usual complications and toward the assurance of a pleasant convalescence for the patient.

I cannot refrain from condemning the pernicious use of cathartics, enemas, or colonic flushings as immediate preoperative preparation. Even enemas should be given more than twelve hours preceding the contemplated operation. Another of the time-honored customs of which I do not approve is withholding water and food for too long a preoperative period. Since dehydration handicaps convalescence, water should be given as desired until three or four hours before the anesthesia. By so doing, the patient does not come to the operating room in a dehydrated condition. Too frequently do we in operation of election change the patient's mode of living for a period of time that is too prolonged. To my mind, this is detrimental from both a physical and a psychic standpoint. Lastly, we want our patient to have a good rest the night before the operation, but I would warn against too profound a basal anesthesia.

Certainly the operative procedure required, the time consumed consistent with careful technique, and the trauma are vital factors influencing the smoothness of the convalescence. However, there are definite ways in which the easiest possible convalescence may be given a patient. I wish to submit to you the regime that we have

used for the last four years which has given us very pleasing results.

The risk of operation today is measured largely by the postoperative pulmonary complications. According to Cutler and Hunt¹ approximately 2 per cent of all patients operated on, 4 per cent of all patients who have laparotomies, and 8 per cent of all patients who have epigastric operations develop pulmonary complications. That pulmonary hypoventilation exists after abdominal operations is a generally accepted fact. The alteration in the type of respiration, the limitation of respiratory effort, and the sense of thoracic oppression which many of these patients exhibit or of which they complain are evidences of this fact.

Overholt² and others have observed that the intraperitoneal pressure in the upper abdomen is subatmospheric. Following the injection of air into the peritoneal cavity or after laparotomy, two changes in the diaphragm were observed. The diaphragm assumed a higher position and its excursions were definitely restricted.

Churchill and McNeil³ found that the vital capacity following upper abdominal operation, such as cholecystectomy, was reduced to 30 per cent of that patient's vital capacity before operation. They found further that the vital capacity in lower abdominal operation, such as appendectomy and herniotomy, was reduced about 50 per cent.

The mere application of a tight dressing over the upper abdomen in a normal individual reduces the vital capacity on an average of 30 per cent. Necessarily then, all abdominal dressings should be put on very lightly and tight strapping should be avoided. The trauma incident to the incision in the abdomen, plus the factors mentioned above, produce marked hypoventilation which encourages the complication of atelectasis or even massive collapse. To prevent these complications, the patient is turned frequently from side to side and is encouraged by the nurse to breathe deeply. This the patient will

* Read before the 64th Annual Session, Arkansas Medical Society, Hot Springs National Park, May 8, 1939.

not do unless adequate morphine is used. It might be thought that morphine inhibits respiration. It does reduce the respiratory rate but the amplitude is markedly increased due to the alleviation of pain incident to the respiratory movements. It has been definitely shown that the vital capacity of patients postoperatively is materially increased with adequate use of this drug. The patient is further encouraged to move the arms and legs many times daily which reduces the incidence of thrombophlebitis, necessarily thereby reducing the dreaded complication of embolus with pulmonary infarcts.

An additional problem presented by our postoperative patient is dehydration. Coller⁴ found the average total fluid loss during the operative and the four-hour postoperative period to be a little over one liter of which about 700 c.c. was water evaporated from the skin and lungs. The remainder is lost by way of excretion by the kidneys. Conditions are such then that on the day of operation most patients are dehydrated to some extent.

To restore the water balance it is our practice to give from 1000 to 1500 c.c. of 5 per cent glucose in normal saline intravenously. If fluids must be withheld by mouth for a longer period of time than the postoperative day, then fluids must be continued intravenously for a longer period of time.

Coller has shown that in the average postoperative patient at least 2000 c.c. of water is lost by vaporization in twenty-four hours and that 1500 c.c. is lost by way of the urinary tract. If the patient is vomiting or has a diarrhea, further water loss, of course, is inevitable. Therefore, to maintain a water balance after the operative day, from 3000 to 4000 c.c. of fluid must be given each twenty-four hours. Because it is about isotonic with the blood, it is our preference to give 5 per cent glucose. It has been shown that any stronger solution of glucose by vein, unless accompanied by sufficient insulin, increases the abdominal distention. I would caution against the use of intravenous saline solution over too prolonged a period of time without checking the sodium chloride content of the blood plasma.

In every patient who has had a laparotomy or whose peritoneum has been traumatized in any way, the gastrointestinal tract is functionally inactive for varying lengths of time. This is manifested by nausea, vomiting, gas pains, and abdominal distention. These are all indications of

functional ileus. The degree, the extent, and the duration of the functional ileus are dependent upon and proportionate to the amount of intraperitoneal trauma during and following the operation. Certainly, if infection be present, the trauma is more prolonged. If the ileus is due to the mechanical trauma which occurs during the operation as a result of manipulation of intra-abdominal viscera; that is, due to handling, chilling, and drying, the period of ileus usually ends in 8 to 12 hours. During this time nothing is permitted by mouth. If the ileus continues, fluids by mouth are withheld still longer. Morphine is given in doses of a fourth grain every four hours unless the respiration drops below 12 per minute. It has been shown by Orr⁵; Plant and Miller⁶; Ochsner, Gage, and Cutting⁷, and others that morphine exerts a powerful stimulating effect on the intestinal activity and does not inhibit it as believed by many clinicians. The action of morphine on the intestines is to increase the tone without materially affecting the peristaltic movement. This undoubtedly is the reason morphine is one of the best drugs that we have, not only in the prevention of ileus but in its treatment. Morphine also exerts a similar effect on the gut which is already distended and will produce tonic contraction of the bowel as effectively as any other measure. However, it is more effective in the prevention of distention than in the treatment of a dynamic ileus. The morphine is given from 36 to 72 hours postoperatively depending upon the individual. Of course, if infection be present in the peritoneum, it is usually continued for a longer period of time.

It is also our practice in those patients who have had upper abdominal operation to use the heat tent over the patients' abdomens to prevent functional ileus. Meuller⁸ showed that the application of heat to the abdomen increases the somatic circulation and that concomitantly there is a decrease in the splanchnic blood supply which in turn favors intestinal peristalsis and decreases intestinal distention. When ileus persists and is manifested by distention of the stomach with vomiting, it is imperative that the retained secretions of the upper gastrointestinal tract be removed. This is best accomplished by continuous suction through an indwelling duodenal catheter as suggested by Wangensteen. It is imperative during the course of the functional ileus to avoid giving substances which predispose to gas formation. We have learned empirically that the administration of sweetened juices, such as orange juice and other sweet

drinks, increases abdominal distention and the patient's discomfort. Recently Fine and Levenson⁹ have shown that although dilute glucose solutions are absorbed readily from the normal intestinal tract, when functional ileus is present abnormal gas formation results.

After the functional ileus has subsided which usually is on the first day postoperatively, sips of warm water are allowed. Iced drinks should be avoided because they tend to produce gastric dilatation and promote functional ileus. If the patient tolerates the warm water on the first postoperative day, on the second day he is permitted to have Coca-Cola because it contains a nonfermentable sugar. Also, at this time unsweetened tea and fat-free broth may be added to the patient's diet. On the third postoperative day, certain carbohydrates such as toasts and gruel may be added as these foods produce little gas distention. All fruit juices and milk are withheld until the fifth day.

It is surprising in this supposed day of scientific enlightenment how many surgeons still believe that early evacuation of the intestinal tract is necessary. We have found this entirely unnecessary. It is our practice to start mineral oil or petrolagar on the third or fourth day postoperatively so that the contents of the intestinal tract do not become too inspissated and produce a fecal impaction. It does not concern us if the patients have no evacuation for six or seven days. Occasionally, however, to relieve the mental anxiety of the patient, it is necessary to obtain a bowel movement by the introduction of a small amount of water into the rectum.

There still is some controversy among clinicians concerning the necessity for catheterization postoperatively. It is our rule to catheterize the patient every eight hours if they have not voided. It is our belief that overdistention of the bladder plays a greater role in the causation of cystitis and posterior urethritis than the introduction of infection by the procedure of catheterization.

The following is a summary of the treatment as given day by day after operation:

DAY OF OPERATION:

1. Change of position hourly.
2. Morphine sulphate: a fourth grain q.4.h. for 36-72 hours.
3. 1000 to 1500 c.c. of 5 per cent glucose intravenously.

4. Nothing by mouth.
5. Heat tent to abdomen.
6. Catheterization q.8.h.

FIRST DAY:

1. Morphine q.4.h.
2. Change position frequently.
3. Warm water by mouth.
4. If nausea has ceased, discontinue glucose.
5. Catheterization is continued if necessary.

SECOND DAY:

1. Morphine given prn.
2. Tap water and Coca-Cola by mouth.
3. Encourage increased activity.

THIRD AND FOURTH DAYS:

1. Morphine discontinued.
2. Tea (nonsweetened); fat-free broth; no fruit juices.
3. Mineral oil or petrolagar.

FIFTH DAY:

1. Wound dressed.
2. Soft diet.
3. Mineral oil or petrolagar continued.

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COMING MEDICAL MEETINGS

Southern Medical Association, Memphis, November 21-24th.

Arkansas Medical Society, Fort Smith, April 15-17th, 1940.

THE TREATMENT OF CHRONIC EMPYEMA IN CHILDREN*

HARVEY SHIPP, M. D.

Little Rock

The term chronic empyema is used to describe long-standing pleural infection of varying duration. At one extreme there are the acute cases which discharge pus longer than four to six weeks, thereby becoming chronic; while at the other extreme there are the cases of pleural abscess which are intermittently open over a period of years. The duration of the empyema largely determines the character of the walls and the nature of the contents. The recent case shows firm localizing adhesions with granulation tissue which produces pus of variable character. As the chronicity persists, the walls become heavier and more fibrous, in some instances assuming the consistency of cartilage while the contents become stale and fetid in character. The absence of organisms in this type of abscess does not necessarily indicate a tuberculous infection since the non-specific abscesses often become sterile.

The factors contributing to chronic empyema are rather well recognized at this time. Generally speaking it results from failure to carry out completely the basic principles of treatment for an acute empyema. The most common causes are as follows: (1) inadequate drainage with resultant secondary pocket formation; (2) aspiration prolonged beyond its usefulness which allows the wall to become too rigid for ready collapse; (3) extensive pneumothorax following injudicious open drainage before the lung has become fixed to the chest wall; (4) presence of a bronchopleural fistula or an underlying lung abscess which has failed to heal; (5) presence of foreign material in the pleural space such as rubber tubing, sequestra, Beck's paste, etc.; (6) osteomyelitis of a rib with sinus passing into the pleural space; (7) the presence of an underlying carcinoma of the lung; and (8) presence of a tuberculosis. In this connection smear, cultures, guinea pig inoculation, and microscopic study of the excised pleura should be utilized in all cases of chronic empyema where the mode of onset or clinical course leaves the slightest doubt as to its original etiology. If there is a mixed infection superimposed on a tuberculous empyema, it may be impossible to demonstrate the tubercle bacillus in the fluid. Occasionally it is difficult to

find evidence of tuberculosis in a known case since granulation tissue may have overlaid the original site of infection. Mixed tuberculous empyema is not so common in children. I, personally, have seen only one such case, this followed the injudicious open drainage of a pure tuberculous empyema.

The treatment of chronic empyema in children and adults presents essentially the same problems except that children react less favorably to radical procedure and so respond better to conservative treatment. Regardless of the time of life the chronic empyema is noted, to obtain a cure, two fundamental objectives must be attained, namely, drainage with disinfection and closure of the cavity. In practice these two conditions are fulfilled by the surgeon in numerous ways and the individual circumstances determine whether these two results can be accomplished in single or multiple stage operations. Only in the small encapsulated empyemas can the surgeon accomplish both results in a single stage. The majority of cases require multiple stage operation. As a rule drainage of the cavity causes a lessening in size up to a certain point, after which the rigid chest wall on one side and the thick fibrous wall on the other will approximate no further. The alternatives, therefore, must be to collapse the chest wall onto the lung or bring the lung out to the chest wall, i.e., thoracoplasty, or muscle grafting in the former instance, decortication, or discission, in the latter. It was not deemed advisable to submit children to the aforementioned operations without first exhausting all more conservative procedures for several reasons, namely, the weakened condition of the children, the resultant weakened thoracic wall, the oftentimes unsightly deformity of the thorax, and the associated high mortality.

It has been established that light continued traction gives far greater extension than the sudden application of a much greater force and results in no injury to the part. With this in mind we set out to devise or find an apparatus which would give this continual gentle traction on the empyema walls and which, at the same time, would drain and disinfect the cavity. In studying the literature it was found that Hart had used such an apparatus in the treatment of **acute** empyema with excellent results and had suggested its use in treatment of chronic empyema. Since it had been shown that every empyema space varies slightly in size during the respiratory cycle regardless of the thickness of the walls, and since haste is not indicated in treat-

*Read before the Sixty-fourth Annual Session, Arkansas Medical Society, Hot Springs National Park, May 10, 1939.

ment of these cases, we felt justified in attempting conservative closure before resorting to radical procedures. For the past four years we have used tidal irrigation as a routine procedure in the treatment of both acute and chronic empyema on the chest service at the Arkansas Children's Hospital in Little Rock to determine its value in this entity.

Intercostal drainage is used routinely and an ordinary urinary catheter 18-23 F is used as the drainage tube; the size of the catheter is determined by the width of the intercostal space in the child. The catheter is connected to the bottle as shown. By varying the distance "a" the amount of suction applied to the walls of the cavity is accurately controlled. The slight motion of the empyema wall during the respiratory cycle allows continual irrigation and drainage. The to and fro motion of the fluid also tends to break up and liquefy the thick purulent contents of the cavity. Favorable pressure in the empyema space, that is, pressure exerted towards the center of the space is transmitted equally throughout the entire periphery since pressure exerted on a fluid within a closed space is transmitted equally throughout that closed space. Therefore, as this gentle force is maintained there results a gradual decrease in the volume of the cavity without pocketing until complete closure results around the small tube. The resultant small sinus heals completely within a few days after removal of the tube.

In a period of four years we have learned many lessons and for the most part have overcome the chief objections to the use of this apparatus. In the first place a chronic empyema which persists as a result of a foreign body in the pleural space is obviously not suitable for this method of treatment. The presence of a large bronchopleural fistula precludes the use of irrigating fluid in the empyema cavity. To my knowledge this has not been used in treatment of tuberculous empyema with secondary infection, but I see no danger provided reexpansion of the underlying lung is permissible. A common objection to this procedure is that the drainage tube used is too small for adequate drainage of a thick purulent fluid. This is a serious problem in a few cases but we have been able to overcome it without serious difficulty. By the end of the first 24-48 hours the thick contents have become diluted sufficiently so that there is little interference from this source, but **constant** supervision is required during this interval. The fact that the patient must remain in bed until

the tube is removed is more beneficial than objectionable for these cases can well use a period of complete rest following the prolonged toxic state. The period of enforced rest allows a weakened myocardium to recover more completely than it would otherwise. This treatment must be carried out under supervision, therefore, it may not be practical in the home unless ideal conditions can be established. On the other hand, all chronic empyemas require hospitalization and in this instance, the results justify the expenditure of the necessary time and care.

In presenting the following cases it is not intended to leave the impression that this method is to be taken as a cure for all cases of chronic empyema. However, our results do justify the use of this technique before resorting to radical surgery in children. I have selected for this study twelve cases of chronic empyema out of approximately a total of 90 cases. Those selected represent the most difficult and the most advanced cases in the series. The patients on admission were uniformly malnourished, extremely toxic, and showed deformity of the thorax. Nephritis, myocarditis, and rickets, were not infrequent complications. The empyema had been present before admission from three to thirty months, the average duration of the complication before admission being a few days less than eight months, to be exact 233.5 days. The ages varied from two years to 12 years, the average being slightly over six years. Five, or 42%, of the twelve cases had been operated before admission, the operation in all cases having been rib resection with open drainage. Of the 12 cases, five were massive empyema in chronic stage with displacement of the mediastinal structures, one of these having pyropneumothorax with collapse of the lung; three gave homogenous opacity of the homolateral thorax; three involved 50% of the homolateral thoracic cavity; and two were encapsulated empyema, one of these secondary to lung abscess and bronchopleural fistula. Eight of the series followed pneumococcic pneumonia, three influenza pneumonia and one followed a lung abscess secondary to aspiration of a foreign body. The pneumococcus was found as the causative organism in four cases, the pneumococcus and staphylococcus in one; pneumococcus, staphylococcus, and short chain streptococcus in two cases; Vincent's organisms, staphylococcus, and streptococcus in one case; and four were sterile. These patients were not discharged from the hospital until the child was well nourished, fever free on exercise for at least

ten days, drainage site completely healed, and complete freedom from chest infection according to the x-ray examination. The period of hospitalization and treatment averaged 64.3 days per case. One case prolonged the treatment average with a multitude of complications and if this case were omitted from the report the general average from admission to complete cure would be 44 days per case. The mortality rate in this series is zero. In the entire series of 90 treated by this method in the past four years at the Children's Hospital there has been the loss of one child, who entered with a bilateral acute empyema with unresolved pneumonia and died within 24 hours after admission. One of the chief dangers in accepting any report on the treatment of chronic empyema is that the physician in his enthusiasm may report his results before sufficient time has elapsed following discharge of the patient. It is well known that these cases have a tendency to reactivation. We have been able to follow these children for an average 21.5 months and there has been no case of recurrence to date. Five years from now we may be able to give a more valuable report from this standpoint.

In conclusion may I say that this work is not completed and our results are improving as we learn more about treating this complication. It is difficult to properly evaluate the results of this work since one must never be precipitate in reaching conclusions regarding therapeutics. Radical surgery cannot be eliminated in all cases of chronic empyema in children, but our results lead us to the conclusion that this therapeutic measure does relieve duration of morbidity, spares the patient a permanent deformity of the thorax, and saves life, since it decreases to a negligible minimum the necessity for radical surgery of the thorax.

YOUR TITLE IS "M. D." USE IT!

There is widespread abuse of the title "Doctor." Legal procedures have failed to correct the situation. We have attorney generals' opinion, opinions from the State Board of Registration in Medicine, offers of cooperation from the Department of Health, the county prosecutor's office, etc. Some results are obtained in specific instances, but under present procedures a violation must occur before action can be taken. Let us as physicians, endowed with the degree M. D., start to place emphasis on that degree. No one else can use it. Use "M. D." in your speech, in your correspondence, on your signs, prescription pads, bill heads, etc. Gradually the public will start to discriminate. In this positive way we can gradually but most effectively offset the parasitical influence of so-called "doctors" who are not M. D.'s and at the same time we can continue to refer specific abuses to the proper authorities.

—Wayne County Medical Society Bulletin.

YOUR STATE HOSPITAL

N. T. HOLLIS, M. D.
Little Rock

February first, of this year, marked the end of the first year of the active use of shock therapy in the treatment of various types of mental diseases in the Arkansas State Hospital. The majority of these cases were classified as dementia praecox. Results have been encouraging, although not conclusive by any means. In common with all workers in this field, we have found what we might naturally expect for any treatment, that the sooner treatment begins following a mental breakdown, the better the results in restoring to a normal condition. As most workers have found, those cases which have been in our hospital for a number of years get very little result from this treatment. A table (Table I) listing these cases treated shows this very plainly.

We have completed treatment with insulin in thirty-six cases. Out of this number, we have sent sixteen home, two of whom have been returned, seemingly in just as bad condition as before. The reports we get from the others are rather encouraging, as most of them seem to be working regularly and have had no return of their psychotic symptoms. Four of the remaining cases have improved sufficiently to have ground parole and are working every day around our hospital. These four, with the sixteen we have sent home, constitute our positive results out of the thirty-six cases. The other sixteen received little, if any, benefit from the treatment. Reference to the table shows that without exception, all the cases who have improved from the treatment have been comparatively early cases.

The technique used in the treatment has changed somewhat from time to time. For example: two of our most outstanding results lately have been on patients who, after showing little response to the insulin treatment alone, made remarkable response to a treatment of metrazol with insulin. Reports throughout the country now indicate that other workers have obtained similar results. Giving small doses of insulin puts the patient in a more or less comatose condition. We can then give him an injection of metrazol without subjecting him to the intense fright common to the metrazol treatment alone. That is our routine treatment now—putting a patient on the insulin injections over a period of a few weeks; if he shows no improvement under this regime, then we start giving him an additional dose of metrazol three times a week. The pa-

tient already being comatose, their doses of metrazol or considerably less than that necessary to attain the convulsive state by the use of metrazol alone.

In treating this number of patients, the writer has given more than half of his time to this work. Assisting him has been the full time services of a graduate nurse and two attendants. Thus it can readily be seen that the treatment is expensive. We figure that it costs the hospital approximately \$70.00 per person, above the usual hospital maintenance.

We are, at present, enlarging the department so that in the future we will be handling sixteen patients at a time instead of eight as we have this past year. We feel that our experienced personnel, as a result of the year's training in this field, will enable us to double our department without any undue increase in the risk associated with the treatment. Thus we hope to cut the individual expense considerably. There is, and no doubt there always will be, a definite risk associated with this form of treatment. We have lost one patient, as a result of aspirating some of the sugar solution we used in waking him up, following which he developed an aspiration pneumonia. We have had three patients develop this complication during the year, but the other two had no difficulty in overcoming this condition.

Although our results have been very encouraging, it is difficult to understand how anyone doing work with this treatment can conceive of it as a cure for the disease. In working up these cases, so many personality difficulties and results of unfortunate environments, have become apparent, that to the writer it seems unreasonable to expect that an injection of any kind is going to take care of all these factors. Thus in treating these cases, we have combined with the chemotherapy every possible aid available in our hospital. Interviews have been held in considerable number, with each patient, in trying to untangle some of the mental knots readily discovered. A definite recreational program has been instituted in their behalf. Special privileges have been extended to these patients; increased attention has been given to the care of their person; and last, but to the writer one of the most important factors, have been the interviews secured with the relatives of each patient. In many instances, concrete suggestions were made concerning desirable changes in attitude and actions toward these patients. For example, the attitude of these families toward masturbation, so prevalent in these cases, has been rather distressing. So

much so, that this subject was gone into thoroughly in interviewing the parents. Several parents have shown plainly, by their attitude, their resentment toward the patient in bringing disgrace upon the family by a mental breakdown. Efforts to change this unnatural attitude were, in some cases, in vain. In these cases, the patient suffered accordingly. The insistence with which parents will cling to the idea expressed in such statement as, "If we take you home this time, will you promise to behave yourself?" has been a revelation to the writer. All of these things demonstrate the many possible angles, which must be considered, in treating mental diseases. They also show the desirability and necessity of such work.

One of the most important problems in handling all mental cases is presented by the feeling of hopelessness concerning mental disease, which is prevalent in lay circles, and in some instances, in medical circles as well. This has been quite a stumbling block in our work. Perhaps, when the time comes when the general feeling toward mental diseases and mental hospitals has changed somewhat, our percentage of cures or, perhaps, we should say arrests, will make a most impressive climb. Then we will be getting our patients early—the necessity of which has been so amply demonstrated in all diseases. We shall also be securing the cooperation from families affected and from society in general to a much greater extent than is possible at this time.

The medical and social problem presented by mental disease can never be handled properly by mental hospitals alone. When it is handled properly, it will be through the best efforts of: first, the general medical profession in being constantly alert for early mental symptoms and its insistence upon immediate attention. Second, an attitude on the part of families affected that will yield ready cooperation with the family physician, as suggested above; and, lastly, by psychopathic hospitals, which because of the attitude of the two groups above, will be staffed and equipped sufficiently to handle such cases as will be presented to them for treatment.

All this is quite easy to say but will be hard to accomplish. We, in the State Hospital, recognize the fact that it is our responsibility to take the lead in presenting the foremost social problem, that of mental disease, to the state at large.

To meet this responsibility, we are taking advantage of every possible means of approach presented to us. Various staff members have addressed professional and lay bodies on various

aspects of our problem. We welcome such opportunities. The kindness, with which we have been received, has been gratifying to us all.

We are publishing a little monthly magazine containing hospital news and general information concerning the hospital, which we are sending to every county in the state.

The inquiries we get from you doctors, out over the state concerning the patients whom you have sent here, is certainly most gratifying to us, indicating as it does a continuation of interest in the patients. We are hoping that our work here will merit your confidence and approval.

Your occasional visits are welcome. Feel free to make any suggestions which might come to mind, for, as we have stated before, we recognize the fact that without your cooperation our hospital will never be able to do the work that it could do with your cooperation.

TABLE I
INSULIN PATIENTS

Diagnosis		Mos. in Hosp. Prior to Treatment Results
1. Catatonic Praecox	305	Unimproved
2. Hebephrenic Praecox	102	Ground Parole
3. Catatonic Praecox	70	Unimproved
4. Undifferentiated Praecox	67	"
5. Catatonic Praecox	43	"
6. Catatonic Praecox	39	"
7. Catatonic Praecox	38	"
8. Hebephrenic Praecox	26	"
9. Undifferentiated	23	"
10. Catatonic Praecox	21	"
11. Paranoid Praecox	16	Home
12. Paranoid Praecox	13	Unimproved
13. Undifferentiated Praecox	13	Home
14. Undifferentiated Praecox	12	Ground Parole
15. Catatonic Praecox	11	Ground Parole
16. Paranoid Praecox	10	Ground Parole
17. Paranoid Praecox	9	Unimproved
18. Undifferentiated Praecox	9	Unimproved
19. Paranoid Praecox	9	Home and return'd
20. Simple Praecox	8	Died 6 mos. after treatment TBC
21. Catatonic Praecox	8	Improved
22. Catatonic Praecox	7	Home
23. Undifferentiated Praecox	5	Died — Aspiration pneumonia
24. Paranoid Praecox	3	Home
25. Catatonic Praecox	2	Home and return'd
26. Paranoid Praecox	2	Home
27. Paranoid Praecox	2	"
28. Paranoid	2	"
29. Paranoid	2	"
30. Catatonic	2	"
31. Catatonic	2	"
32. Paranoid	2	"
33. Catatonic	1	"
34. Catatonic	1	"
35. Catatonic	1	"
36. Undifferentiated	1/2	Ground Parole

THE FRANKLIN COUNTY CORRESPONDENT

October 7, 1939

Dear Dr. Brooksher:

The Franklin County Medical Society held a meeting September 26 in the Secretary's office, Ozark, with the following attending:

Drs. W. C. Porter, W. H. Bollinger, H. O. Clark, A. S. J. Clarke, E. W. Pillstrom, Harvey H. Schloosman, Thos. Douglass and Miss Augusta Ledding, county health nurse.

Also with us by invitation were Mr. Crawford from the Little Rock office of the F. S. A. and Miss Sarah Blakely, Mr. Russell Hughes from the local F. S. A. office.

The proposed contract of the F. S. A. for medical care of the farmers, was approved by this society. This program will be set up sometime in the spring. Individual members of this society are at liberty to accept the contract or to refuse. We consider that this is in all probability the beginning of state medicine, but what have you?

One of our members, Dr. W. F. Akin of Branch, is sick and in the Veterans Hospital, Outwood, Ky.

Yours very truly,
Thos. Douglass, Secretary.

TEN GOLDEN RULES OF A CANCER EXAMINATION

1. Examine the lips, tongue, cheek, tonsils and pharynx for persistent ulcerations; the larynx for hoarseness, and the lungs for persistent cough.
2. Examine the skin of the face, body and extremities for scaly bleeding warts, black moles and unhealed scars.
3. Examine every woman's breasts for lumps or bleeding nipple.
4. Examine the subcutaneous tissues for lumps of the arms, legs and body.
5. Investigate any symptoms of persistent indigestion or difficulty in swallowing. Palpate the abdomen.
6. Examine the lymph node system for enlargement of the neck, groin, or arm pit.
7. Examine the uterus for enlargement, lacerations, bleeding or new growths.
8. Examine the rectum and determine the cause of any bleeding or pain.
9. Examine the urine microscopically for the presence of blood.
10. Examine the bones, and take a radiograph of any bone which is the seat of a boring pain, worse at night."

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

PHRENIC NERVE INTERRUPTION

PHRENIC nerve interruption in the treatment of tuberculosis has lately lost much of its former popularity. By some it is condemned as being practically useless, if not actually harmful. A more discriminating judgment of this operation is urged by J. W. Cutler who has analyzed 122 consecutive phrenic nerve interruptions in his private patients.

Claims concerning the value of phrenic nerve interruption are contradictory and confusing. One author reviewing 78 reports involving a total of 7,435 operations performed as an independent procedure and found "cures" reported in 23%. On the other hand, Coryllos, citing his own experiences and those of several workers abroad concluded that the operation is "not efficient, not without danger, and causes a loss of precious time."

This wide divergence of opinion is in good part explained by the type of patient treated—phenomenally good results are in relatively early cases and they would undoubtedly have been obtained from bed-rest alone, while in far advanced cases and in the presence of large, thick-walled cavities success can rarely be expected.

In a consecutive series of 122 tuberculous patients on whom phrenic nerve interruption was performed, it was done on 106 as an independent collapse measure. Many stages and varieties of tuberculosis are represented. Sexes are about equally distributed. The operation was done 60 times on the left side and 62 on the right side. In 65 the interruption was temporary, in 57 permanent.

Evaluation of the operation should be based primarily on the changes that follow in the lung under consideration, as determined primarily by comparative X-ray findings, and not necessarily upon the ultimate fate of the patient. The time element, following operation, is of extreme importance. The good results of phrenic nerve interruption become evident within the first six months. Late results are more difficult to define; therefore, a three-to-five-year post operative interval, as a basis for late results, is not unreasonable.

The evaluation of phrenic nerve interruption is discussed under four main headings: (1) the value of the operation as an independent collapse measure, (2) the value as an adjunct to other collapse measures, (3) complications of the operation, and (4) temporary as contrasted with permanent phrenic nerve interruption, and their corresponding indications and contraindications.

In retrospect, the cases are classified as "apparently suitable" and "unsuitable." Unsuitable cases include: (1) apical cavities 3 or more cm. in diameter, for the operation is useless in the attempt to close apical cavities in which the apex has become more or less excavated and adherent to the thoracic wall; (2) dense fibrotic lesions with embedded cavities; (3) pneumonic consolidations; (4) acute infiltrations. In this series there were 30 patients with lesions deemed in retrospect as unsuitable for the operation. The contraindications, in the sense that no benefit will follow, cannot however be considered absolute for occasionally a distinctly good result will follow.

Seventy-one patients fell into the "apparently suitable" category and were evaluated as follows: (a) Unimproved, 52%. No material X-ray evidence of improvement in the tuberculous lesions noted within 3 to 6 months after the operation, or an actual increase in the disease. Lack of improvement was observed in all kinds of cases with "apparently suitable" lesions, including both cases of early limited infiltrations without X-ray evidence of cavity and cases of advanced disease.

(b) Improved, 34%. Cavity was either closed or reduced in size or there was X-ray evidence of significant clearing with lessening of toxemia and improvement in well-being. However, in only 14

of the 24 cases in this group, did the improvement result in the stabilization of the lesion so that no further therapy was required. In the remaining 10, improvement, marked at first, was in time followed by serious relapse.

(c) Cleared, 14%. Clearing of the disease in the lung except for some fibrous strands and a few small, sharply defined, moderately dense, spots. There were cavities of varying sizes in 8 and infiltration without X-ray evidence of cavity in 2. The result followed so shortly after operation and in such manner as to leave little doubt that the paralysis of the diaphragm was the responsible factor. The lungs have remained clear over an average period of more than six years after operation.

No concrete conclusions could be reached as to the type of case among the "apparently suitable" patients in which the operation can be undertaken with reasonable assurance of success. Good results were obtained in advanced disease and in unexpected situations. On the other hand, failures were encountered in minimal cases. In general, good results were observed more frequently when the major lesion was situated below the clavicle, and when the cavity was isolated, thin-walled and surrounded by nearly normal lung tissue.

The relative value of phrenic nerve interruption as an alternative to artificial pneumothorax and thoracoplasty, is considered. In the majority of cases in which phrenic nerve interruption was used as an alternative to pneumothorax the operation was either a useless undertaking or relapse followed an initial improvement. In those cases in which bilateral pneumothorax ultimately became necessary, selective collapse could be established in only 12 out of 28 patients. Time wasted on phrenic nerve interruption was largely responsible for the formation of extensive adhesions. Phrenic nerve surgery should not be looked upon as a substitute for pneumothorax, but must be regarded as a supplementary form of therapy.

More serious is the question of phrenic nerve interruption in preference to thoracoplasty. Of 31 patients in this series suitable for an immediate thoracoplasty, but subjected to phrenic nerve interruption in the hope of avoiding thoracoplasty, 3 died from hemoptysis and 3 from progressive tuberculosis and 7 more became hopeless invalids. In retrospect, these tragedies might have been avoided had thoracoplasty been performed promptly when conditions were most favorable. The important thing

is not to resort to a phrenic nerve operation when thoracoplasty is plainly indicated, and not to delay thoracoplasty beyond the time when the phrenic nerve operation has accomplished its maximum good.

Phrenic nerve interruption was carried out also in 16 patients either as an adjunct to other collapse measures or in the treatment of certain complications of pneumothorax therapy including: ineffective pneumothorax, hemoptysis, troublesome cough, discontinued pneumothorax therapy, spontaneous pneumothorax, empyema cavities. The operation accomplished the desired result in about one-third of these patients.

Complications of phrenic nerve interruption must be taken into consideration. In the present series, significant complications attributable to the operation, were encountered in 6 with death in 2. Cardiac failure, which accounted for the 2 deaths, was the outstanding complication. Other important complications were interference with the cough mechanism (2 patients) gastric disturbance (belching and a sense of fullness in the stomach) annoying but not serious (3 patients). The fact remains, however, that the treatment of tuberculosis does not always permit a safe and sure choice of therapy. Phrenic nerve interruption may, in individual cases, prove to be accompanied by the least risk.

Both temporary and permanent phrenic nerve interruption have their place. A temporary phrenic nerve interruption is indicated (1) when the problem is of an emergency nature, as in hemorrhage or active disease requiring immediate collapse therapy when other collapse measures cannot be instituted at the moment, and (2) when other collapse measures such as pneumothorax or thoracoplasty, are in prospect. A permanent phrenic nerve operation is indicated when the operation is carried out as the sole therapeutic measure in the attempt to cure the patient after other collapse procedures have been considered unsuitable, or are plainly contraindicated.

The danger today is not that too many phrenic nerve operations will be performed or that they will be undertaken in an indiscriminate manner, but that the operation will be discarded. This would be unfortunate, for phrenic nerve interruption appears to have value in 15 to 25 per cent of patients. At times it may be the simplest means for saving a patient's life. The operation, however, should be restricted to properly selected cases.

Phrenic Nerve Interruption, J. W. Cutler, M. D., Amer. Review of Tuber., July, 1939.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under direction of the Council

W. R. BROOKSHER, M. D., Editor

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EDITORIAL COMMENT

This issue of The Journal contains the names of those members of the Arkansas Medical Society whose 1939 membership assessment has been paid, a total of 1,056 physicians. Approximately forty physicians, members of the Society in 1938 and remaining in practice, have thus far failed to renew their membership in the Society. Every possible effort has been made to continue them in active membership. It is apparent that they are indifferent to the value of organized medicine. For convenience of the members, the roster has been placed in the center of this issue in order that it may be conveniently removed for filing. Please preserve the roster for possible later use.

THE SALE OF SAMPLES

The Journal has been advised that representatives have called on physicians in the state recently offering to purchase their accumulation of sample medicines. On a purely moral ground, a profession with the standards of the medical profession, can not stoop to such a practice. In good faith have the manufacturers of these products placed them in the hands of physicians asking only a clinical trial, feeling that such a trial will convince the physicians of the value of their product, and thus lead him to its continued use. Physicians generally have made use of this custom of manufacturers for the purpose of supplying their charity patients with needed medication for which the patient could ill afford to pay. That this encourages subsequent purchase over-the-counter by the patient and his friends is quite true, but not germane to this discussion. The sale of sample medicines, necessarily later finding their way into the legitimate retail trade, can not lead to hearty cooperation between physicians, retail druggists and pharmaceutical manufacturers. A devious pathway is formed whereby the druggist is encouraged to counter-prescribe and substitute. Physicians owe the public and their profession an obligation not to enter into this scheme.

FRAUDULENT REPRESENTATIVES

Recently one M. A. Ross, claiming to represent the National Sales Co. of Cincinnati and offering medical publications with a bonus of books, traveled the state and victimized at least one member of the Society. The Journal again warns its readers that it is well to view with all caution the offers of the unknown agent who has for sale medical books, surgical instruments, radios, cigarettes, carburetors, tires, roofs, or what not. Reflection on the deal which is usually presented will bring the realization that more than your money's worth is offered—a proper time for you to make careful inquiry as to the possibility of delivery once you part with your cash. Investigate before you buy!

Every physician is his own public relations counsel, and every contact he makes with his patients and friends hinders or advances the position of himself and his colleagues in the hearts and minds of the public.—Bulletin of the Jackson County Medical Society, Kansas City, Mo.

PROCEEDINGS OF SOCIETIES

The Sebastian County Medical Society was addressed October 10th by J. W. Amis on "Autohemotherapy in Urticarial Conditions."

R. E. Weddington, Secretary.

The Fifth Councilor District Medical Society met in Camden October 5th. The afternoon scientific program was as follows: "A Brief Review of Intestinal Obstruction," Wm. Hibbitts, Texarkana; "Latent Scurvy," D. B. Barber, Alexandria, and "Surgery of the Right Colon," C. W. Mayo, Rochester. Following the banquet session, a public meeting was held with the following speakers: L. H. Reeves, Fort Worth, "The Implications of Socialized Medicine;" C. W. Mayo, Rochester, "Time and Its Relation to Disease", and an address by Governor Bailey. The Council of the Arkansas Medical Society held a noon meeting on this date in Camden.

The Benton County Medical Society met in dinner session at Rogers October 12th for the following program: "Peptic Ulcer," Leslie Webb; "Treatment of Asthma," J. G. Siceluff, and "Study of Goiter," F. T. H'Doubler, all speakers of Springfield.

The Sixth Councilor District Medical Society met in Texarkana September 15th for the following program: "Treatment of Acute Empyema," Peachy Gilmer, Shreveport; "Value of Immune Sera and Vaccines," Dr. Wolfe, Shreveport; "Under Water Treatment of Arthritis and Psychosis," Geo. B. Fletcher, Hot Springs National Park, and "Vasotomy and Vasectomy," H. King Wate, Hot Springs National Park.

J. W. Burnett, Secretary.

The Clinical Orthopaedic Society met in Little Rock October 14th as the guests of F. Walter Carruthers. Appearing on the program, in addition to clinics presented by Dr. Carruthers, were Stewart Cromer, Geo. V. Lewis, M. J. Kilbury, E. C. Gay, Euclid Smith and D. A. Rhinehart.

The seventh Postgraduate Study Course of the Arkansas Medical Society was held at the University of Arkansas School of Medicine, Little Rock, October 10-11th. The following program was presented: "Chronic Nontuberculous Infections of the Respiratory Tract," B. P. Briggs, Little Rock; "After Urinary Antiseptics: What About Kidney Infections," R. Lee Hoffman, Kansas City; "The Diagnosis and Treatment of Meningitis," Paul F. Stookey, Kansas City; "The Role

of the Internist in the Care of Patients with Thyroid Disease," O. C. Melson, Little Rock; "The Surgical Treatment of Hyperthyroidism," Geo. V. Lewis, Little Rock; "Roentgen Irradiation in the Treatment of Toxic Goitre," W. R. Brooks, Fort Smith; "Occlusal Disease of the Peripheral Arteries," E. V. Allen, Rochester, Minnesota; "Clinical Indications of Anterior Pituitary-Like Sex Hormone," Robert L. Schaefer, Detroit; "A Classification of the Arthritides: A Clinical Demonstration," Paul Williams, Dallas; "Appendicitis: Errors in Management and Educational Needs," J. K. Donaldson, Little Rock; "A Dentist Talks to His Physician Friends," W. E. Hutchinson, D. D. S., Little Rock; "The Effects of Drugs in the Nose," Paul L. Mahoney and John Agar, Little Rock; "Urgency, Dysuria, and Incontinence in the Female," R. Lee Hoffman; "Staphylococcic Infections," Paul F. Stookey; "Clinical Indications of the Estrogenic Hormone," Robert L. Schaefer, and "Hypertension," E. V. Allen. An open house at the medical school and hospital was an additional feature.

Miles F. Kelly recently entertained the members of the Grant County Medical Society at a chicken dinner at his home in Sheridan. Speakers were: Jos. F. Shuffield, H. Fay H. Jones, Little Rock and W. A. Snodgrass, Jr., Pine Bluff.

The Pulaski County Medical Society was addressed October 2nd by W. B. Grayson, "The Organization and Function of the State Health Department."

E. H. White, Secretary.

The Arkansas Society of Medical Technologists was addressed at Little Rock September 23rd by A. S. Buchanan, C. A. Rosenbaum, S. P. Cromer, Chas. R. Henry, J. S. Levy and W. C. Langston.

The Tenth Councilor District Medical Society elected the following officers at its meeting in Fort Smith September 19th: President, B. L. Ware, Greenwood; Vice-president, J. W. Amis, Fort Smith, and Secretary-Treasurer, Ruth Ellis Lesh, Fayetteville.

The Southeast Oklahoma Medical Association was addressed at its meeting in Poteau, Oklahoma, October 24th, by S. J. Wolfermann, Fort Smith, "Diagnosis of Acute Intestinal Obstruction," and Chas. T. Chamberlain, Fort Smith, "Vitamin Deficiency Diseases."

MEMBERSHIP ROSTER OF THE ARKANSAS MEDICAL SOCIETY—1939

ARKANSAS COUNTY

Davis, G. C.	Gillett
Dickens, Homer	DeWitt
Drennen, S. A.	Stuttgart
Fowler, A.	Humphrey
John, M. C., Sr.	Stuttgart
John, M. C., Jr.	Stuttgart
Lumsden, C. A.	DeWitt
Rasco, C. W., Jr.	DeWitt
Rasco, C. W., Sr.	DeWitt
Swindler, E. B.	Stuttgart
Wassell, C. M.	St. Charles
Whitehead, R. H.	DeWitt
Wilson, J. G.	Little Rock
Word, J. T.	Tucker

ASHLEY COUNTY

Barnes, L. C.	Hamburg
Burt, E. G.	Crossett
Cockerham, H. E.	Portland
Cone, A. E.	Portland
Crandall, M. C.	Wilmet
Fletcher, G. W.	Montrose
Hawkins, M. C.	Parkdale
Mask, D. L.	Hamburg
Parker, J. L.	Snyder
Riggins, W. C.	Fort Smith
Smith, M. L.	Crossett
Spivey, C. E.	Crossett
White, E. O.	Hamburg
Wood, J. T.	Crossett

BENTON COUNTY

Atkinson, R. M., Jr.	Bentonville
Chastain, W. M.	Bentonville
Curry, W. J.	Rogers
Duckworth, F. M.	Siloam Springs
Duncan, M. W.	Centerton
Estes, Neal D.	Rogers
Eubanks, F. G.	Decatur
Greene, L. O.	Pea Ridge
Harrison, A. J.	Springdale
Highfill, E. J.	Cave Springs
Hodges, Guy	Rogers
Hughes, G. A.	Siloam Springs
Hurley, C. E.	Bentonville
Koobs, H. J. G.	Rogers
Love, G. M.	Rogers
McNeil, C. L.	Rogers
Moore, W. A.	Rogers
Peacock, A. L.	Gentry
Pickens, E. A.	Bentonville
Pickens, J. L.	Bentonville
Pickens, W. A.	Bentonville
Powell, J. T.	Gravette
Scott, L. L.	Siloam Springs
Thompson, J. S.	Gravette
Tucker, J. B.	Bentonville
Williams, J. R.	Siloam Springs
Wilson, C. S.	Siloam Springs

BOONE COUNTY

Adams, A. V.	Yellville
Chambers, S. W.	Mountain Home
Fowler, Ross	Harrison
Fowler, J. H.	Harrison
Gladden, J. G.	Harrison
Jackson, Ulys	Harrison
Jackson, Loyd	Harrison
Johnson, J. J.	Harrison
Kirby, H. V.	Harrison
Moore, W. T.	Everson
Morrow, J. J.	Cotter
McCoy, O. B.	Harrison
Owens, D. L.	Harrison
Poynor, W. H.	Harrison
Sexton, J. W.	Mt. Judea
Thompson, J. I.	Yellville
Watkins, W. L.	Alpena-Pass
Weast, L. M.	Yellville

BRADLEY COUNTY

Crow, M. B.	Warren
Crow, M. T.	Warren
Ellison, L. E.	Warren
Gannaway, C. E.	Warren
Hope, J. L.	Warren
Hunt, W. J.	Warren
Ivy, J. B.	Wescolo, Texas
Martin, Rufus	Warren
Martin, Chas.	Warren
Reasons, W. B.	Hermitage
Roark, W. N.	Hermitage
Snodgrass, W. A., Jr.	Pine Bluff

The Roster of the Arkansas Medical Society has been placed in the center of this issue to permit its ready removal for filing.

CARROLL COUNTY

Bohannon, J. H.	Berryville
Butt, W. A.	Green Forest
Carter, A. L.	Berryville
Donaldson, C. W.	Green Forest
John, J. F.	Eureka Springs
McCurry, D. K.	Green Forest
Newkirk, Wm. H.	Berryville
Northcutt, Mary Jane	Cassville, Mo.
Webb, J. H.	Eureka Springs

CHICOT COUNTY

Baker, E.	Dermott
Barlow, E. E.	Dermott
Burge, J. H.	Lake Village
Clark, B. C.	Lake Village
Craig, W. A.	Eudora
Douglas, S. W.	Eudora
Easterling, W. D.	Lake Village
Hutson, W. J.	Eudora
Leverette, C. G.	Eudora
McGehee, E. P.	Lake Village
Schwarz, W. J.	Lake Village
Thompson, J. A.	Dermott

CLARK COUNTY

Bremer, J. P.	Point Cedar
Bryant, R. L.	Arkadelphia
Carter, E. E.	Arkadelphia
Dickerson, D. A.	Gurdon
Doane, S. N.	Arkadelphia
Grace, J. K.	Arkadelphia
McLain, J. T.	Gurdon
Reid, Joe W.	Arkadelphia
Ross, H. A.	Arkadelphia
Ross, T. T.	Little Rock
Steed, C. J.	Gurdon
Townsend, C. K.	Arkadelphia

CLAY COUNTY

Blackwood, W. J.	Rector
Clopton, O. H.	Rector
Futrell, J. B.	Rector
Hiller, J. P.	Pollard
Jones, F. H.	Piggott
Latimer, N. J.	Corning
McGuire, J. E.	Piggott

CLEBURNE COUNTY

Birdsong, T. C.	Shiloh
Hall, H. J.	Clinton
Matthews, J. T.	Heber Springs

CLEVELAND COUNTY

Adams, T. L.	Rison
Dunman, B. E.	New Edinburg
Hancock, W. G.	Rison
Harris, S.	Herbine
Robertson, A. B.	Rison
Ruth, Junius	Rison

COLUMBIA COUNTY

Baker, J. J.	Magnolia
Carrington, H. K.	Magnolia
Cooksey, W. P.	Magnolia
Horn, W. H.	Taylor
Jones, T. H.	Waldo
Jordan, T. S.	Magnolia
Longino, Luther A.	Magnolia
McLeod, G. J.	Magnolia
Rushton, Joe F.	Magnolia
Smith, P. M.	Magnolia
Souter, A. J.	Waldo
*Walker, J. C.	Emerson

CONWAY COUNTY

Burnett, E.	Hattiesville
*Colay, J. H.	Morrilton
Etheridge, C. E.	Morrilton
Goatcher, A. L.	Plumerville
Halbrook, J. F.	Plumerville
Hardison, T. W.	Morrilton
Holloway, W. R.	Center Ridge
Jones, R. A.	Perry
Kelso, S. T.	Solgochachia
Matthews, J. M.	Morrilton

*Matthews, E. L.	Morrilton
Mobley, H. E.	Morrilton
Scarlett, Wm. P.	Morrilton

CRAIGHEAD-POINSETT COUNTIES

Alcott, Geo. B.	Weiner
Altman, J. T.	Jonesboro
Barrett, E. R.	Jonesboro
Barrett, R. M.	Black Oak
Blanton, M. E.	Jonesboro
Burge, H. G.	Newton
Campbell, G. O.	Trumann
Crantrell, M. L.	Marked Tree
Cohen, O. T.	Jonesboro
Elders, J. W.	Harrisburg
Ellis, Ira W.	Monette
Fatherree, L. L.	Little Rock
Haltom, W. C.	Jonesboro
Harrell, W. B., Jr.	Jonesboro
Horner, E. J.	Jonesboro
Jernigan, R. M.	Jonesboro
Jones, J. H.	Lepanto
Jones, J. K.	Lepanto
Lutterloh, P. W.	Jonesboro
McAdams, H. H.	Jonesboro
McCurry, J. H.	Cash
McDaniel, L. H.	Tyroneza
McDaniel, E. C.	Tyroneza
Nisbett, Frank	Brookland
Overstreet, W. C.	Jonesboro
Pierce, J. O.	Marked Tree
Ramsey, J. W.	Jonesboro
Ratliff, R. W.	Jonesboro
Reagan, C. H.	Marked Tree
Shanlever, R. C.	Jonesboro
Sloan, R. M.	Jonesboro
Smith, W. H.	Bono
Stroud, E. J.	Jonesboro
Stroud, H. A.	Jonesboro
Stroud, P. T.	Jonesboro
Thorn, W. T.	Monette
Tullos, A. M.	Trumann
Verser, Joe	Harrisburg
Verser, W. W.	Harrisburg
Willett, R. H.	Jonesboro

CRAWFORD COUNTY

Bennett, B. L.	Van Buren
Bruce, B. B.	Alma
Campbell, C. J.	Mulberry
Crigler, J. R.	Alma
Engler, F. G.	Alma
Kirkland, S. D.	Van Buren
Kirkland, S. S.	Marshall
Kirksey, O. J.	Mulberry
McKelvey, A. A.	Van Buren
Savery, H. W.	Van Buren
Stewart, John M.	Van Buren
Young, L. G.	Van Buren

CRITTENDEN COUNTY

Blalock, J. F., Jr.	Crawfordsville
Hare, T. S.	Crawfordsville
Irby, J. T.	Earl
McVay, L. C.	Marion
Parker, A. C.	Clarkedale
Purnell, R. L.	Marion
Ray, R. H.	Earl
Stevenson, B. M.	West Memphis
Watson, H. S.	Earl

CROSS COUNTY

Barr, A. F.	Cherry Valley
Griffin, W. L.	Cherry Valley
Hickman, R. L.	Hickory Ridge
Longest, Ruffin	Wynne
Miller, J. S.	Parkin
Peterson, T. A.	Wynne
Price, T. G.	Wynne
Smith, R. S.	Parkin
Stewart, T. J.	Wynne
Wilson, Thomas	Wynne

DALLAS COUNTY

Cheatham, H. A.	Princeton
Ellis, W. S.	Fordyce
Estes, E. E.	Fordyce
Lisenbee, A. M.	Sparkman
Taylor, J. E. M.	Sparkman
Ward, W. P.	Fordyce

DESHA COUNTY

Biscoe, Gibbs	Dumas
Chennault, J. C.	McGehee
Hellums, J. H.	Dumas
Kimbro, C. H.	Tillar
Leverett, Marion	McGehee
MacCammon, Vernon	Arkansas City
Rands, H. A.	Dumas
Smith, H. T.	McGehee
White, R. F.	McGehee

DREW COUNTY

Binns, V. C.	Monticello
Collins, A. S. J.	Monticello
Dickins, R. D.	Monticello
Gates, S. M.	Monticello
Jones, L. B.	Monticello
Price, J. P., Jr.	Monticello
Pope, M. Y.	Monticello
Wilson, J. S.	Monticello

FAULKNER COUNTY

Brittain, W. L.	Conway
Brooke, H. C.	Conway
Dawson, R. L.	Wooster
Dickerson, C. H.	Conway
Downs, J. H.	Vilonia
Dunaway, L. S.	Conway
Fraser, N. E.	Conway
Glover, A. J.	Guy
Hardy, H. B.	Greenbrier
Hassell, L. L.	Conway
Harrod, George	Conway
Henderson, G. L.	Conway
Kitley, J. R.	Mayflower
Lieblong, J. S.	Greenbrier
Mabry, Tom	Vilonia
McCollum, I. N.	Conway
Smith, M. T.	Conway
Taylor, R. L.	Conway
Westerfield, J. S.	Conway
Williams, E. T.	Greenbrier

FRANKLIN COUNTY

Akin, W. F.	Branch
Bollinger, W. H.	Charleston
Douglass, Thos.	Ozark
Gibbons, W. H.	Ozark
Porter, W. C.	Ozark
Post, J. L.	Van Buren

GARLAND COUNTY

Adams, Frank	Hot Springs
Black, T. N.	Hot Springs
Blackshare, W. M.	Hot Springs
Bollmeier, L. N.	Hot Springs
Bowman, M. B.	Hot Springs
Boydstone, J. O.	Hot Springs
Browne, P. Z.	Hot Springs
Browning, E. R.	Hot Springs
Brewer, H.	Hot Springs
Burton, N. B.	Hot Springs
Burton, Frank	Hot Springs
Cassada, B. F.	Hot Springs
Chamberlain, W. W.	Hot Springs
Chestnutt, J. H.	Hot Springs
Clardy, Floyd	Hot Springs
Coffey, G. C.	Hot Springs
Collings, H. P.	Hot Springs
Connell, W. H.	Hot Springs
Diederich, V. P.	Hot Springs
Ellis, L. R.	Hot Springs
Fletcher, G. B.	Hot Springs
Fulmer, Doyle W.	Hot Springs
Garratt, C. E.	Hot Springs
Gray, W. E.	Hot Springs
Hannon, R. E.	Hot Springs
Herbert, G. A.	Hot Springs
Hukill, O. K.	Walnut Ridge
Jarrell, Foster	Hot Springs
King, L. E.	Hot Springs
King, O. H.	Hot Springs
Klugh, W. G.	Hot Springs
*Laws, W. V.	Hot Springs
Lee, D. C.	Hot Springs
Luterloh, C. H.	Hot Springs
*MacLaughlin, O. J.	Hot Springs
Martin, L.	Hot Springs
Moss, C. S.	Hot Springs
Nims, C. H.	Hot Springs
Pate, C. N.	Hot Springs
Porter, W. F.	Hot Springs
Power, Allyn	Hot Springs
Phillips, J. W.	Cedar Glades
Proctor, J. M.	Hot Springs
Purdum, E. A.	Hot Springs
Reed, L. E.	Hot Springs
Rowland, J. F.	Hot Springs
Sanders, T. E.	Hot Springs
Scott, Jett	Hot Springs
Scully, F. J.	Hot Springs
Shaw, Ernest	Hot Springs
Short, Z. N.	Hot Springs
Smith, Euclid	Hot Springs
Smith, O. A.	Hot Springs
Smith, W. K.	Hot Springs
Stell, J. S.	Hot Springs
Stough, D. B.	Hot Springs
Strachan, J. B.	Hot Springs
Sullivan, A. G.	Hot Springs
Tribble, A. H.	Hot Springs

Wade, H. K.	Hot Springs
Weil, S. D.	Hot Springs
Wilkins, J. S.	Hot Springs
Wootton, W. T.	Hot Springs
Wright, H. K.	Hot Springs

GRANT COUNTY

Cole, C. F.	Prattsville
Cole, John	Prattsville
Cox, J. E.	Leola
Hope, O. W.	Sheridan
Kelly, M. F.	Sheridan
Kelly, O. R.	Sheridan

GREENE COUNTY

Blackwood, Jeff	Jonesboro
Bridges, G. P.	Paragould
Cupp, R. W.	Marmaduke
Dillman, J. A.	Paragould
Lilington, W. E.	Paragould
Haley, Robert, Jr.	Paragould
Haley, R. J.	Paragould
Hardesty, C. A.	Paragould
Huddins, J. J.	Paragould
Hutcherson, R. L.	Delaplaine
Lamb, W. M.	Paragould
Majors, W. M.	Paragould
McKelvey, Earle D.	Paragould
Self, Mack	Paragould

HEMPSTEAD COUNTY

Allison, W. G.	* Hope
Branch, J. W.	Hope
Cannon, G. E.	Hope
Carrigan, P. B.	Hope
Darnall, H. H.	Fulton
Gentry, J. E.	McCaskill
Kolb, A. C.	Hope
Lile, L. M.	Hope
*McDonald, T. L.	Hope
McKenzie, Jim	Hope
Martindale, J. G.	Hope
Robins, W. F.	Ozan
Smith, Don	Hope
Weaver, J. H.	Hope

HOT SPRING COUNTY

Barrier, W. F.	Malvern
Brown, H. L.	Malvern
Hodges, W. G.	Malvern
McCray, E. H.	Malvern
McCray, R. V.	Malvern
Norton, J. M.	Donaldson
Pharr, J. W.	Bismark
Prickett, M. D.	Malvern

HOWARD-PIKE COUNTY

Alford, T. F.	Murfreesboro
Burleson, J. J.	Antoine
Chambers, W. H.	Dierks
Dildy, E. V.	Nashville
Duncan, M. D.	Murfreesboro
Gibson, W. M.	Nashville
Gould, W. B.	Glenwood
Holcombe, J. T.	Mineral Springs
Holt, H. H.	Nashville
Hopkins, J. S.	Nashville
Hoyt, Jonathan	Dierks
Purtle, C. C.	Glenwood
Roberts, J. L.	Nashville
Simpson, W. B.	Nashville
Woods, R. L.	Delight

INDEPENDENCE COUNTY

Askew, J. B.	Batesville
Bone, O. L.	Newark
Churchill, C. A.	Batesville
Copp, Noel	Calico Rock
Craig, M. S.	Batesville
Estes, W. H.	Sage
Evans, L. T.	Batesville
*Gray, C. C.	Batesville
Gray, E. M.	Mountain Home
Gray, F. A.	Batesville
Harris, C. L.	Melbourne
Hinkle, C. G.	Batesville
Huskey, I. M.	Cave City
Jeffery, Paul	Bethesda
Johnston, O. J. T.	Batesville
Jones, S. S.	Calico Rock
Jones, W. A.	Los Angeles, Calif.
Laman, G. T.	Cave City
McAdams, V. D.	Cord
Monfort, J. J.	Batesville
Robertson, S. N.	Sulphur
Roe, C. E.	Viola
Smith, R. L.	Melbourne
Weathers, J. L.	Salem
Wilson, W. H.	Oxford
Wood, O. S.	Salem
Wyatt, F. Q.	Batesville

JACKSON COUNTY

Best, A. L.	Newport
Causey, G. A.	Swifton
Elton, A. M.	Newport
Erwin, I. H.	Newport
Gray, C. R.	Newport
Harris, M. L.	Newport
Ivy, J. B.	Tuckerman
Justice, S.	Swifton
Jamison, O. A.	Tuckerman
Kimberlin, K. K.	Tuckerman
Morris, R. O.	Tuckerman
*Morton, R. F.	Swifton
Owens, M. B.	Newport
Pierce, W. N.	Tupelo
Stephens, G. K.	Newport
Walker, H. O.	Newport
Watson, E. L.	Newport

JEFFERSON COUNTY

Beard, J. C.	Pine Bluff
Bruce, W. H.	Pine Bluff
Capel, C. B.	Pine Bluff
Capel, H. T.	Pine Bluff
Caruthers, C. K.	Pine Bluff
Causey, H. A.	Pine Bluff
Clark, O. W.	Pine Bluff
Cunningham, T. J.	Pine Bluff
Hames, Fred	Pine Bluff
Hankinson, O. C.	Pine Bluff
Higginbotham, C. J.	Pine Bluff
Hughes, A. A.	Pine Bluff
Jenkins, J. S.	Pine Bluff
John, J. W.	Pine Bluff
Lemons, J. M.	Pine Bluff
Lowe, W. T.	Pine Bluff
Luck, B. D., Jr.	Pine Bluff
Luck, B. D., Sr.	Pine Bluff
Maynard, R. E.	Pine Bluff
McMullen, E. C.	Pine Bluff
Palmer, J. T.	Pine Bluff
Payne, Virgil	Pine Bluff
Shelton, M. A.	Wabbaseka
Simmons, W. H.	Pine Bluff
Spillyards, J. S.	Pine Bluff
Walker, J. K.	Pine Bluff

JOHNSON COUNTY

Burgess, M. E.	Phoenix, Ariz.
Graves, S. M.	Mt. Levi
Hardgrave, G. L.	Clarksville
Hunt, Earle H.	Clarksville
Johnston, R. H.	Clarksville
Kolb, J. M.	Clarksville
Kolb, J. S.	Clarksville
Pierce, S. C.	Hartman
Pillstrom, E. W.	Ozark
Siegel, G. R.	Clarksville

LAFAYETTE COUNTY

Baker, F. E.	Stamps
Keith, A. W.	Stamps
McKnight, J. F.	Bradley
Youmans, F. W.	Lewisville

LAWRENCE

Ball, C. C.	Ravenden
Blaine, Mitchell	Mammoth Springs
Brown, W. W.	Hardy
Cruse, E. J.	Black Rock
Elders, J. B.	Walnut Ridge
Felts, J. W.	Alicia
Guthrie, T. C.	Smithville
Hardaway, J. E.	Lynn
Hatcher, W. W.	Imboden
Henderson, A. G.	Imboden
Hughes, J. C.	Hoxie
Hull, H. B.	Mammoth Springs
Jackson, J. F.	Walnut Ridge
*Johnston, Wm.	Hardy
Johnson, T. Z.	Walnut Ridge
Kendall, W. S.	Strawberry
Land, J. C.	Walnut Ridge
Merrell, J. L.	Walnut Ridge
Tibbels, Chas. D.	Black Rock
Townsend, C. C.	Walnut Ridge
Watkins, G. Max	Walnut Ridge

LEE COUNTY

Bogart, H. D.	Marianna
Crawford, W. S.	Marianna
Chaffin, C. W.	Moro
Hamner, J. H.	Aubrey
Hodge, N. C.	Marianna
McClendon, Mac	Marianna
White, H. L.	Rondo

LINCOLN COUNTY

Dixon, C. W.	Gould
Johnson, R. L.	Grady
Ringgold, G. W.	Gould
Taylor, L. T.	Star City
Thielliere, A. C.	North Little Rock
Wood, G. C.	Grady

LITTLE RIVER COUNTY

Castile, Herman	Foreman
Harding, C. A.	Ashdown
King, E. R.	Ashdown
LaFavers, R. R.	Foreman
Phillips, P. H.	Ashdown
Ringgold, J. W.	Ashdown
Yates, E. W.	Foreman

LONOKE COUNTY

Beaty, S. S.	England
Brewer, J. F.	Kerrs, (P. O.) Scott
Callahan, E. A.	Carlisle
Corn, F. A.	Lonoke
Crowgey, W. B.	Scott
Harris, E. H.	Coy
Southall, S. A.	Lonoke
Ward, O. D.	England
Watson, A. C.	Little Rock
Wells, J. B.	Scott
Whaley, E. S.	Carlisle

MADISON COUNTY

Beeby, Charles	Huntsville
Counts, G. D.	Wesley
Dixon, C. B.	Decatur
Farmer, Howard	Oden
Hill, N. J.	Hindsville
Walker, J. F.	Combs
Youngblood, Fred	Huntsville

MILLER COUNTY

Burnett, J. W.	Texarkana
Collom, S. A.	Texarkana
Daniel, N. B.	Texarkana
Daubs, W. H.	Lewisville
Fuller, T. E.	Texarkana
Good, L. P.	Texarkana
Hibbitts, Wm.	Texarkana
Hunt, Preston	Texarkana
Kirkpatrick, R. R.	Texarkana
Kittrell, T. F.	Texarkana
Kosminsky, L. J.	Texarkana
Lanier, L. H.	Texarkana
Laws, C. S.	Texarkana
Lee, A. G.	Texarkana
Lennard, F. M.	Texarkana
Longino, H. E.	Texarkana
Middleton, B. C.	Texarkana
Mosley, K. T.	Texarkana
Murry, H. E.	Texarkana
Parson, G. W.	Texarkana
Porter, John T.	Texarkana
Priest, Perry	Texarkana
Robins, R. R.	Texarkana
Smith, W. D.	Texarkana
*Webster, H. R.	Texarkana
Williams, J. F.	Texarkana

MISSISSIPPI COUNTY

Atkinson, Gean	Manila
Atkinson, Geo.	Manila
Baur, Paul S.	Etowah
Beasley, J. E.	Blytheville
Boyd, D. L.	Blytheville
Caldwell, C. A.	Blytheville
Campbell, J. H.	Joiner
Ellis, N. B.	Wilson
Harwell, C. M.	Osceola
Harris, Chas. P.	Leachville
Hosey, N. R.	Joiner
Hubener, L. L.	Blytheville
Hudson, Thos. F.	Luxora
Husband, F. L.	Blytheville
Johnson, I. R.	Blytheville
Johnson, R. L.	Bassett
Mahan, T. K.	Blytheville
Massey, L. D.	Osceola
Mobley, Hugh	Wilson
Polk, J. T.	Keiser
Robinson, A. E.	Leachville
Robinson, F. A.	Blytheville
Robinson, H. D.	Manila
Saliba, J. A.	Blytheville
Schirmer, R. E.	Blytheville
Sheddan, W. J.	Osceola
Sims, H. C.	Blytheville
Skaller, M. L.	Blytheville
Smith, F. D.	Blytheville
Stevens, C. C.	Blytheville
Tidwell, J. L.	Dell
Tipton, Paul L.	Blytheville

Walls, J. M.	Blytheville
Webb, Floyd	Blytheville
Wilson, C. E.	Blytheville
Wilson, J. H.	Magnolia

MONROE COUNTY

Boswell, W. L.	Clarendon
Bradley, W. T.	Blackton
Clark, A. S. J.	Ozark
Dalton, M. L.	Brinkley
Martin, W. H.	Holly Grove
McKnight, C. H.	Brinkley
McKnight, E. D.	Brinkley
Murphey, N. E.	Clarendon
Redman, John W.	Clarendon

MONTGOMERY COUNTY

Freeman, W. D.	Mt. Ida
McLean, J. H.	Caddo Gap
Robins, J. D.	Warren
Stueart, J. B.	Norman
Watkins, G. E.	Mt. Ida

NEVADA COUNTY

Buchanan, A. S.	Prescott
Garner, W. M.	Bodcaw
Hesterly, J. B.	Prescott
Hesterly, S. J.	Prescott
Hirst, O. G.	Prescott
Hughes, Felix A.	Prescott
Hughes, R. P.	Prescott
Pool, W. B. H.	Bodcaw

OUACHITA COUNTY

Byrd, E. J.	Bearden
Clemens, J. P.	Mt. Holly
Early, C. S.	Camden
Jamerson, J. B.	Camden
Kennerly, R. C.	Camden
McGill, S. D.	Camden
Partee, N. G.	Camden
Plunkett, C. M.	Elliott, P. O. Camden
Powell, B. V.	Camden
Rhine, T. E.	Thornton
Rhinehart, J. S.	Camden
Robins, R. B.	Camden
Robins, Rowland R.	Camden
Rushing, J. L.	Chidester
Smythe, C. H.	Texarkana
Thompson, H. F.	Bearden
Thompson, S. A.	Camden
Whitehead, R. H., Jr.	Camden
Word, N. S.	Camden

PHILLIPS COUNTY

Baker, J. P.	West Helena
Blackwood, J. Q.	Helena
Brown, E. T.	Marvell
Butts, J. W.	Helena
Connolly, W. B.	Helena
Cox, A. E.	Helena
Cox, A. W.	Helena
Cruise, J. J.	Helena
Dozier, F. S.	Helena
Ellis, J. B., Sr.	Helena
Ellis, W. A., Jr.	Helena
Fink, M.	Helena
*Henry, M.	Helena
King, J. A.	Elaine
King, W. C.	Helena
Kultgen, Edward	Elaine
Maddox, A. H.	Elaine
Nicholls, J. W.	Helena
Norton, E. F.	Marvell
Orr, W. R.	Helena
Parker, O.	Elaine
Rightor, H. H.	Helena
Russwurm, W. C.	Helena
Storm, Geo. R.	West Helena

POLK COUNTY

Bogard, John R.	Mena
Campbell, C. A.	Hatfield
Hawkins, B. H.	Mena
Heller, H. G.	Mena
Hilton, J. G.	Mena
Lee, F. A.	Vandervort
McElory, F. Q.	Mena
Murphy, John	Opal
Nesbitt, James M.	Forrest City
Redman, Pierie	Mena

POPE-YELL COUNTY

Ballenger, W. E.	Plainview
Berryman, L. D.	Russellville
Cale, Walter	Atkins
Cowan, R.	London
Gardner, L.	Russellville
*Haster, E. J.	Dardanelle
Hood, Robert	Russellville
Hunt, E. C.	Ola

Millard, Roy I.	Russellville
Montgomery, H. L.	Gravelly
Smith, L. M.	Russellville
Smith, R. L.	Russellville
Stanford, J. M.	Russellville
Tate, A. B.	Russellville
Teeter, B. R.	Russellville
Teeter, C. R.	Russellville
Turner, Steve F.	Russellville

PRAIRIE COUNTY

Adams, Edward	DeValls Bluff
Crockett, W. H.	Bischo
Calley, J. H.	Waldron
Gilliam, J. C.	Des Arc
Lynn, J. R.	Hazen
Parker, Wm. McKinley	DeValls Bluff
Porter, T. G.	Hazen
Williams, W. J. B.	Des Arc

PULASKI COUNTY

Aday, John L.	Little Rock
Agar, John	Little Rock
Allen, Estes	Little Rock
Allen, H. R.	Little Rock
Anderson, C. C.	Little Rock
Arkebauer, Chas.	Little Rock
Atkinson, Shelby	North Little Rock
Autry, P. G.	Little Rock
Bailey, W. E.	Little Rock
Banks, Jeit	Little Rock
Barrier, L. F.	Little Rock
Bennett, B. A.	Little Rock
Blakely, R. M.	Little Rock
Bond, S. P.	Little Rock
Briggs, B. P.	Little Rock
Brooks, C. M.	Little Rock
Brown, T. D.	Little Rock
Calcote, R. J.	Little Rock
Caldwell, Robert	Little Rock
Carruth, O. A.	Little Rock
Carruthers, F. W.	Little Rock
Cazort, Alan	Little Rock
Cheairs, D. T.	Little Rock
Chesnutt, C. R.	Little Rock
Choate, H. L.	Little Rock
Church, B. L.	Little Rock
Compton, J. N.	Little Rock
Cook, R. C.	Little Rock
Coon, A. B.	Little Rock
Cosgrove, K. W.	Little Rock
Crawford, Jim	Little Rock
Cummins, Bryce	Little Rock
Cunningham, J. C.	Little Rock
Daly, M. G.	Little Rock
Darby, W. J.	North Little Rock
Darnall, R. F.	Little Rock
Davis, J. C.	Little Rock
Day, E. O.	Little Rock
Degroat, A. F.	Little Rock
Dibrell, J. R.	Little Rock
Dibrell, J. L.	Little Rock
Dishongh, H. A.	Little Rock
Donaldson, J. K.	Little Rock
Eubanks, R. M.	Little Rock
Ferguson, R. L.	Chicago, Ill.
Fletcher, Elizabeth	Little Rock
Fowler, Hollar	Little Rock
Freedman, Theo	Little Rock
Freemyer, N. W.	Little Rock
Fulmer, S. C.	Little Rock
Fulmer, P. M.	Little Rock
Gann, Dewell, Jr.	Little Rock
Gay, Ellery C.	Little Rock
Gray, A. F.	Little Rock
Gray, Oscar	Little Rock
Gray, Edwin F.	Terre Haute, Ind.
Grayson, W. B.	Little Rock
Hardeman, D. R.	Little Rock
Harris, Fred Wm.	Little Rock
Harris, R. P.	Hot Springs
Hayes, J. D.	Little Rock
Hayes, J. H.	Little Rock
Henry, Charles	Little Rock
Herron, John T.	Little Rock
Higgins, H. A.	Little Rock
Hoge, S. F.	Little Rock
Hollenberg, H. G.	Little Rock
Hollis, N. T.	Little Rock
Holmes, Glenn	Little Rock
Howell, A. R.	Little Rock
Hummel, H. G.	Little Rock
Hundling, H. W.	Little Rock
Hyatt, D. T.	Little Rock
*Jobe, A. L.	Little Rock
Johnson, Glenn	Little Rock
Jones, H. Fay H.	Little Rock
Junkin, S. P.	Little Rock
Kriesel, W. A.	Little Rock
Kilbury, M. J.	Little Rock
Kirby, A. C.	Little Rock
Kory, R. C.	Little Rock

Lamb, W. A.	Little Rock
Langston, W. C.	Little Rock
Law, R. A.	Little Rock
Levy, Jerome	Little Rock
Lewis, Geo. V.	Little Rock
Lyons, Virgil E.	Little Rock
Mahoney, P. L.	Little Rock
May, C. B.	Little Rock
May, J. R.	Little Rock
McCaskill, M. E.	Little Rock
McClain, M. D.	Little Rock
McCormack, G. A.	Little Rock
McLochlin, R. E.	Little Rock
Melson, O. C.	Little Rock
Melson, Madeline M.	Little Rock
Murphey, Pat	Little Rock
Moore, Rufus D.	Mt. Pleasant
Morgans, Dollie	Little Rock
Newman, W. V.	Little Rock
Oates, Chas. E.	Little Rock
Parmley, Val	Little Rock
Parsons, John E.	Little Rock
Parsons, Wilfred E.	Little Rock
Patterson, R. Q.	Little Rock
Phillips, Samuel	Little Rock
Phipps, W. E.	Little Rock
Pirnieque, A. F.	Little Rock
Raney, Thos. J.	Little Rock
Reagan, G. W.	Little Rock
Reagan, L. D.	Little Rock
Reaves, B. J.	Little Rock
Reed, C. C., Sr.	Little Rock
Reed, C. C., Jr.	Little Rock
Regnier, W. A.	Crossett
Rhinehart, B. A.	Little Rock
Rhinehart, D. A.	Little Rock
Richardson, W. R.	Little Rock
Riegler, N. W.	Little Rock
Roberts, John N.	Little Rock
Robinson, B. L.	Little Rock
Rodgers, Clyde D.	Little Rock
Rogers, F. O.	Little Rock
Rosenbaum, C. A.	Little Rock
Rowland, R. E.	Little Rock
Ruff, Horace E.	Little Rock
Sadler, W. L.	Little Rock
Samuel, John M.	Little Rock
Sanderlin, J. H.	Little Rock
Shearer, W. F.	Little Rock
Shipp, A. C.	Little Rock
Shipp, Harvey	Little Rock
Shuffield, J. F.	Little Rock
Smith, John W.	Little Rock
Smith, W. Myers	Little Rock
Snodgrass, W. A.	Little Rock
Stathakis, John	Little Rock
Starn, Howard S.	Little Rock
Stewart, H. V.	Little Rock
Stover, A. R.	Oak Park, Ill.
Strauss, A. W.	Little Rock
Summers, J. A.	Little Rock
Switzer, D. M.	North Little Rock
Thomas, P. E.	Little Rock
Thompson, E. I.	Little Rock
Thompson, G. D.	Little Rock
Vinsonhaler, Frank	Little Rock
Wallis, Chas.	Little Rock
Watkins, Anderson	Little Rock
Watkins, John G.	Little Rock
Watson, C. F.	Little Rock
Washburn, A. M.	Little Rock
Wayman, A. K.	Little Rock
Wayne, J. R.	Little Rock
Wayne, W. D.	Richmond, Ind.
Webb, V. T.	El Paso, Texas
Wemy, N. F.	Little Rock
White, E. H.	Little Rock
Witt, C. E.	Little Rock
Woern, W. H.	England
Young, Robert C.	Mablevale
Zell, Lawrence	Little Rock

RANDOLPH COUNTY

Baltz, M. A.	Pocahontas
Brown, J. W.	Pocahontas
Finney, C.	Maynard
Hamil, W. E.	Pocahontas
Handley, E. L.	Pocahontas
Loftis, J. R.	Pocahontas
Loftis, W. O.	Pocahontas
Ryburn, J. W.	Pocahontas
Smith, R. O.	Biggers

SAINT FRANCIS COUNTY

Bogart, C. N.	Forrest City
Bogart, J. A.	Forrest City
Caldwell, A. B.	Forrest City
Chaffin, E. J.	Forrest City
Darnall, Earnest	Colt
Davidson, J. S.	Forrest City

Lanier, Paul S.	Forrest City
McClendon, L. D.	Palestine
Powell, C. V.	Round Pond
Rush, J. O.	Forrest City

SALINE COUNTY

Ashley, John	Benton
Blakeley, M. M.	Benton
Buckley, E. A.	Bauxite
Buffington, T. E.	Benton
Gann, Dewell	Benton
Jones, C. W.	Benton
Lawson, M. G.	Benton
Little, J. E.	Little Rock
Philips, B. L.	Bauxite
Walton, Chas.	Wadsworth, Kansas
Ward, W. W.	Alexander

SCOTT COUNTY

Bevill, Cheves	Waldron
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SEARCY COUNTY

Bing, E. A.	Marshall
Cotton, J. O.	Leslie
Daniel, S. G.	Marshall
Hendley, E. G.	Leslie
Henley, J. A.	Marshall
Leslie, J. O.	Marshall
Pate, J. C.	Big Flat
Rogers, W. F.	St. Joe
Wood, E. W.	Marshall

SEBASTIAN COUNTY

Adams, W. F.	Fort Smith
Amis, J. W.	Fort Smith
Arnold, W. O.	Fort Smith
Benefield, C. E.	Fort Smith
Benefield, J. H.	Fort Smith
Billingsley, C. B.	Fort Smith
Blair, A. A.	Fort Smith
Brooksher, W. R.	Fort Smith
*Buckley, J. H.	Fort Smith
Bungart, C. S.	Fort Smith
Chamberlain, C. T.	Fort Smith
Coffman, J. S.	Fort Smith
Collette, E. L., Jr.	Dewey, Okla.
Crigler, R. E.	Fort Smith
Dickey, A. B.	State Sanatorium
Dorente, D. R.	Fort Smith
Dorsey, H. C.	Fort Smith
Eberle, W. G.	Fort Smith
Foltz, T. P.	Fort Smith
Foster, M. E.	Fort Smith
Freer, B. W.	Fort Smith
Goldstein, D. W.	Fort Smith
Hall, C. W.	Greenwood
Henry, Louise	Fort Smith
Henry, L. M.	Fort Smith
Hoge, A. F.	Fort Smith
Hederick, Rogers	Booneville
Holt, C. S.	Fort Smith
Honomichl, O. R.	Hackett
Johnson, Hugh	Fort Smith
Johnson, J. E.	Fort Smith
Jones, E. B.	Hartford
Jones, I. F.	Fort Smith
Kennedy, C. H.	Fort Smith
Krock, F. H.	Fort Smith
McConnell, S. P.	Booneville
Means, C. S.	Fort Smith
Moulton, H.	Fort Smith
Moulton, E. C.	Fort Smith
Nowlin, R. R.	State Sanatorium
Riley, J. D.	State Sanatorium
Rose, W. F.	Fort Smith
Scott, M. H.	Fort Smith
Smith, H. H.	Fort Smith
Smith, R. T.	Fort Smith
Southard, J. S.	Fort Smith
Stevenson, J. E.	Fort Smith
Stubbs, S. P.	Fort Smith
Ware, B. L.	Greenwood
Weddington, R. E.	Fort Smith
Williams, C. R.	Morrilton
Wolfermann, S. J.	Fort Smith
Woods, G. G.	Huntington
Woods, W. M.	Huntington
Yankoff, P. D.	Fort Smith

SEVIER COUNTY

Archer, C. A.	DeQueen
Dickinson, R. C.	Horatio
Graves, J. C.	Lockesburg
Hanchey, C. C.	DeQueen
Hendrix, B. E.	Gillham
Hendricks, J. S.	DeQueen
Hopkins, R. L.	DeQueen
Jones, I. G.	DeQueen
Kimball, G. L.	DeQueen

Kitchens, C. E.	DeQueen
Norwood, M. L.	Lockesburg

UNION COUNTY

Atkinson, O. L.	Hampton
Cathey, A. D.	El Dorado
Cullins, J. G.	Marion, Ind.
Debolt, G. C.	El Dorado
Fincher, L. G.	El Dorado
Ginn, W. T.	Calion
*Hardin, M. A.	Norphlet
Harper, John W.	El Dorado
Harper, W. L.	Junction City
Irby, F. L.	El Dorado
Kennedy, C. E.	Smackover
Kitchen, D. K.	Detroit, Mich.
Levine, David	El Dorado
Mahony, F. O.	El Dorado
Mayfield, H. F.	Huttig
Mayfield, H. J.	El Dorado
McGraw, S. J.	El Dorado
McCall, Daniel	El Dorado
Mitchell, J. G.	El Dorado
Moore, B. L.	El Dorado
Moore, J. A.	El Dorado
Munn, E. J.	El Dorado
Murphy, H. A.	El Dorado
Murphy, G. D.	El Dorado
Muse, P. H.	Junction City
Newton, W. L.	Smackover
Patterson, W. L.	El Dorado
Riley, W. S.	El Dorado
Russell, M. V.	El Dorado
Slaughter, J. W.	El Dorado
Sheppard, J. K.	El Dorado
Sheppard, J. M.	El Dorado
Smith, J. M.	Smackover
Smith, D. V.	Huttig
Vines, F. P.	El Dorado
Wharton, J. B.	El Dorado
Wharton, J. B., Jr.	El Dorado
White, D. E.	El Dorado
Wozencraft, W. L.	El Dorado

WASHINGTON COUNTY

Baggett, Jeff	Prairie Grove
Bean, J. L.	Lincoln
Callen, C. B.	Fayetteville
Ellis, E. F.	Fayetteville
Gilbert, A. A.	Fayetteville
Harr, H. T.	Fayetteville
Hathcock, P. L.	Fayetteville
Hathcock, Preston L.	Fayetteville
Hathcock, Alfred	Fayetteville
Hawkins, Benford	Prairie Grove
Henry, H. B.	Biloxi, Miss.
Henry, R. T.	Springdale
Howze, H. H.	Fayetteville
Huntington, R. H.	Fayetteville
Lesh, Vincent	Fayetteville
Lesh, Ruth Ellis	Fayetteville
Lewis, James F.	Fayetteville
Miller, Richard	Fayetteville
Mock, W. H.	Prairie Grove
*Morrow, F. R.	Fayetteville
Richardson, Fount	Fayetteville
Robinson, James A.	Summers
Sisco, C. P.	Springdale
Sisco, Friedman	Springdale
Turner, Roy J.	Fayetteville
Haugen, I. J.	San Francisco, Cal.

WHITE COUNTY

Abington, E. H.	Beebe
Adair, T. L.	Bald Knob
Allbright, S. J.	Searcy
Dunklin, A. J.	Searcy
Hardy, F. P.	Searcy
Hawkins, M. C., Jr.	Searcy
Hudgins, A. H.	Searcy
Peeler, C. M.	Pangburn
Sloan, D. W.	Beebe
Sloan, J. R.	Garner
Spain, A. L.	Letona

WOODRUFF COUNTY

Biles, Lee E.	Augusta
Brewer, E. F.	Augusta
Brewster, B.	McCrory
Dungan, C. E.	Augusta
Evans, R. H.	Chatfield
Fraser, R. L.	McCrory
Hays, J. F.	Russellville
Maguire, F. C., Sr.	Augusta
Morris, J. W.	McCrory
Murphy, Frank	Lexa
Wilkins, W. T.	Cotton Plant

The Third Councilor District Medical Society met in Stuttgart, October 26th, for the following program: Address of Welcome, E. B. Swindler, Stuttgart; Response, E. D. McKnight, Brinkley; "Puerperal Disorders in Obstetrics," Clyde D. Rodgers, Little Rock; "Hypertension," S. C. Fulmer, Little Rock; "The Medical Man and His Neurologic Problems," W. C. Chaney, Memphis, and "The Future of Organized Medicine," H. T. Smith, McGehee. A dinner session concluded the meeting.

"The Medical and Surgical Significance of Albumen in the Urine" was discussed by Geo. R. Livermore and H. G. Rudner, Memphis, before the Mississippi County Medical Society at its October meeting in Blytheville.

F. D. Smith, Secretary.

The semi-annual meeting of the Second Councilor District Medical Society was held at Searcy, October 19th. The following speakers were heard after the dinner session: A. S. Buchanan, "Socialized Medicine"; R. B. Robins, Camden, "Some Remarks on Head Injuries," and S. A. Thompson, Camden, "Heart Problems in the Smaller Centers." Officers elected are: President, A. H. Hudgins, Searcy; Vice-President, M. S. Craig, Batesville, and Secretary-Treasurer, O. J. T. Johnston, Batesville. The Society will next meet in Batesville.

The Pulaski County Medical Society was addressed, October 23rd, by the following, participating in a symposium on "Allergy," John Smith, Raymond Cook, and John Agar, with general discussion by Alan Cazort.

E. H. White, Secretary.

The First Councilor District Medical Society met at Paragould, October 17th, for the following program: Address of Welcome, C. A. Hardesty, Paragould; Response, H. A. Stroud, Jonesboro; "Premature Separation of the Placenta," Ralph M. Sloan, Jonesboro; "The Common Surgical Problems of the Abdomen," Jim Walls, Blytheville; "The Acute Surgical Abdomen," E. M. Holder, Memphis; President's Address, W. W. Hatcher, Imboden; "Pyelitis of Pregnancy," Charles Paddock, Memphis, and "Acute Angina," N. S. Stern, Memphis. Luncheon was served at noon and the following officers were elected: F. H. Jones, Piggott, President, and E. B. McKelvey, Paragould, Vice-President. J. H. McCurry, Cash, remains Secretary. The Society will meet at Jonesboro in the spring of 1940.

OBITUARY

EDWIN JUSTUS HASTER, aged 30, died suddenly while on a fishing trip September 24th. Born in Manhattan, Kansas, he received his high school education at LaVerne, Oklahoma, his pre-medical education at Kansas City Junior College and graduated at the Kansas City College of Medicine and Surgery in 1924. He served an internship at Bethesda Hospital, Cincinnati, before entering practice at Dardanelle in 1925. In addition to his membership in the Pope-Yell County Medical Society, the Arkansas Medical Society, the American Medical Association and the Southern Medical Association, he was active in all civic interests of Dardanelle. Surviving relatives are his wife, his parents, two sisters and a brother.

ERVIN LAYMAN MATTHEWS, aged 54, died at his home in Morrilton, October 17th, after an illness of 10 months. Born at Romance, White county, June 29, 1885, he graduated from the University of Arkansas School of Medicine in 1908, and took postgraduate work in Tulane University. He also graduated from the Naval Medical College in 1914 and served in the United States Navy Medical Corps during the World War. A member of the Conway County Medical Society, serving several terms as president, he was also a member of the Arkansas Medical Society, chief of staff of Saint Anthony's Hospital, Morrilton, a past president of the Morrilton Rotary Club, an alderman, and a member of the Church of Christ. Surviving relatives are his wife, a daughter, two brothers and a sister.

THOMAS C. NEECE, aged 72, died at his home in Walnut Ridge, October 17th. Born in Tennessee, he graduated at the Kentucky School of Medicine in 1894, and had practiced in Lawrence county for 45 years. In addition to his membership in the Lawrence County Medical Society and the Arkansas Medical Society, he was affiliated with the Presbyterian Church. Surviving relatives are two sons and a daughter.

PERSONALS AND NEWS ITEMS

W. H. Daubs, Lewisville, spent a recent vacation touring Yellowstone National Park and the Black Hills country.

H. G. Heller and B. H. Hawkins have been elected post surgeon and child welfare chairman, respectively, of the Mena post of the American Legion.

L. J. Kosminsky, Texarkana, attended the national convention of the American Legion in Chicago.

J. L. Merrell and J. C. Land have been elected vice-commander and surgeon, respectively, of the Walnut Ridge post of the American Legion.

A. S. Buchanan addressed the Camden Lions Club September 20th.

MARRIED—T. J. Cunningham, Jr., Pine Bluff, and Miss Margaret Davis, Rosston, Louisiana, September 18th.

Dr. and Mrs. J. R. Wayne, Little Rock, spent a recent vacation at Miami Beach.

Brian E. Barlow, formerly of State Sanatorium, has joined his father in practice at Dermott.

Dr. and Mrs. Edwin F. Gray, of New York City, formerly of Little Rock, will motor through the New England states and Canada enroute to Terre Haute, Indiana, where they will make their home. Dr. Gray has just completed a three-year residency in Radiology at the Presbyterian Hospital, Columbia Presbyterian Medical Center, New York, and will begin practice in Terre Haute.

John E. Parsons has been elected a member of the Board of Control of the Little Rock Exchange Club.

Euclid M. Smith, Hot Springs National Park, addressed the Delta Medical Society at Greenville, Mississippi, October 11th, on "Our Rheumatic Problems."

W. W. Brown has resigned as contract surgeon, United States Army, and relocated at Hardy.

Ray Williams, formerly of the State Sanatorium staff, has moved to Morrilton where he will engage in practice.

H. Fay H. Jones, Little Rock, attended the recent session of the Southwest Branch of the American Urological Society in Excelsior Springs, Missouri.

C. B. Dixon, formerly of Kingston, has moved to Decatur.

W. B. Harrell, Jr., has moved from Jonesboro to Little Rock where he will be a staff member of the University Hospital.

J. P. Price, Monticello, has enlarged his clinic building to provide a nursery and extra bed rooms.

"Pathological Nasal Conditions Affecting Clinical Allergy" by John S. Agar and Alan Cazort, Little Rock, appeared in the October Southern Medical Journal.

H. Fay H. Jones, Little Rock, attended the American College of Surgeons in Philadelphia as Governor for Arkansas.

Ulys Jackson has been assigned to Boone county as health officer and will locate at Harrison. S. S. Kirkland will relieve Dr. Jackson at Marshall.

S. W. Douglas, Eudora, addressed the Chicot County Tuberculosis Association, October 10th.

R. J. Calcote, Little Rock; Raymond Cook, Little Rock; K. W. Cosgrove, Little Rock; O. H. King, Hot Springs National Park, and E. C. Moulton, Fort Smith, attended the meeting of the American Academy of Ophthalmology and Otolaryngology in Chicago during October.

R. M. Eubanks, Little Rock, spent a recent vacation in Colorado.

Fred H. Krock, Fort Smith, took special work at the Mayo Clinic during October.

R. C. Kennerly and J. B. Jameson recently addressed a Farm Security Administration meeting at Camden.

Dr. and Mrs. R. E. Rowland, Little Rock, spent an October vacation in California.

John Stathakis, Little Rock, spent a recent vacation in Saint Louis.

Dr. and Mrs. H. E. Ruff, Little Rock, visited Saint Paul, Minnesota, during October.

W. B. Grayson, Little Rock, attended the American Public Health Association in Pittsburgh during October.

J. D. Riley, State Sanatorium, addressed the American Legion Auxiliary at Booneville, October 10th.

Ralph Crigler, Fort Smith, recently addressed the Charleston Business Men's Club on "Socialized Medicine."

W. C. Porter was elected a director of the Lions Club of Ozark. G. R. Siegel, Clarksville, spoke at the charter presentation night of this club.

Ralph Crigler and Raymond T. Smith, Fort Smith, attended the Kiwanis district meeting at Hot Springs National Park during October.

The Craighead-Poinsett County Medical Society met for a barbecue supper October 5th. Speakers were: H. A. Stroud, and J. H. McCurry, Cash.

J. B. Askew, Batesville, is taking the course leading to the degree of Master of Public Health at Harvard University.

Byron Z. Binns has become associated with Van C. Binns at Monticello.

Geo. M. Love addressed the Rogers Rotary Club recently on "The X-ray in Diagnosis."

C. E. Witt has been appointed city visiting physician at Little Rock.

John K. Walker is erecting a clinic building at Pine Bluff.

Fred Harris addressed the Little Rock Boys' Club recently on "Health and How to Care for the Body."

Ross E. Maynard addressed the Arkansas State Nurses Association at its meeting in Pine Bluff during October.

The Frisco System Medical Association was addressed at Tulsa, October 23rd, by E. F.

Ellis, Fayetteville, "Duties and Responsibilities of Railroad Surgeons."

Edward Adams has moved from Hazen to DeValls Bluff.

J. D. Riley, State Sanatorium, was one of the speakers in a symposium on "The Management of Tuberculosis" at the Southern Tuberculosis Conference, Charleston, S. C., October 4th.

H. H. Smith, Fort Smith, took special work in New Orleans during October.

F. Walter Carruthers addressed the Little Rock P.-T. A., October 19th, on "Physical Disabilities and How to Overcome Them."

RANDOM THOUGHTS OF THE SECRETARY

October 2nd. At staff meeting this evening, Raymond Smith "bows with respect" on two controversial occasions, which, like the famed story of Charlotte, is somewhat of a record in this vicinity.

October 6th. Camden puts on the most publicized medical meeting for many a day and from all points gather the faithful. The Council, all present, attends to routine business and finds time in which to enjoy the hospitality of Jack Carnes who makes that Camark pottery. At the shooting gallery, we excel with Parmley, being the only shooters who hit the bell. Among others is Hellums, now known as old "Fully Equipped For" by the latest Journal, the amount of ribbing which this typographical slip has caused being compensated for by the knowledge that the advertisements are read. Add innovations: two punch bowls at Bob Robins'; as yet we do not understand why one should be labeled "with" and one "without." At the afternoon session, fortunate that the movie was a short else Carl Bailey himself would have been shown up as one who could not take it. Departing early, missing the public meeting, doubtless the day's feature, sleeping without an interruption, Gurdon to Little Rock, on the Sunshine Special; with many interruptions by bus home, which we reached with the early dawn. Final thought: Where was Bill Arnold, that alert and eager meeting hound, who showed up a full day ahead of time in Camden?

October 10th. To the postgraduate study course this day, the medical school being thronged with the public and a good move this is. Visting the hobby exhibit, noting that Randolph Smith hoards money as a hobby, a desire of all of us. A total registration of 108 today, regrettably small, but if you know the answer the entire postgraduate study committee will hail you to the skies. Earle Hunt claims the best attendance record for Johnson County, 4 of Clarksville's 5 doctors being present, a mark to shoot at if there should be competition in the future. Al Buchanan, Son Corn and Fount Richardson fail to bite on a joke which took Shuffield and Grayson way under, and it may be that the country doctor is less likely to be a sucker after all. Guest of the faculty for a wonderful dinner where there is much of enthusiasm over the outlook for the medical school. Homeward alone until Paris is reached where we take Dorsey away from

Arnold for company on the final stretch, and we indulge in postmortems over the day. A salute to the committee for this course—there is continuous progress in the programs presented and those who fail to attend are depriving themselves, and their patients of the benefits which are so easily secured.

October 17th. By rail to Jonesboro whence Ralph Sloan and Blanton drive us to Paragould where the First Councilor District Society is in session. We take time out to visit Majors, now confined to his bed for over six months, cheerful withal, and we wish that there may be a turn for the better here. McCurry and Hatcher arranged a good program, among the speakers being Charlie Paddock, the Fayetteville boy who made good in the big city. The Paragould wives are entitled to much praise for one of the best meals that has ever been served at a medical meeting. To Memphis with Paddock and Stern while the talk runs from angina to astronomy, taking departure of them, we dine at the Peabody, it apparently being the chef's night out. The hospitality of the day reaches its climax at Memphis, where traditions must be kept, and within one block, six pedestrians speak to us in a solicitous manner.

October 19th. In the company of the jovial Earle Hunt to Searcy for the Second District meeting, almost missing one of the Mayfair's good meals due to error in the hour as printed on the program, a mistake for which no one assumes responsibility, leaving it to the printer, as usual, to bear the blame. Robins and Thompson from Camden way, supported by Al Buchanan, provide a program of interest. Homeward in the night, Earle no more reserved than usual with his conversation, regaling us with tales of incidents in a busy and hectic life. In particular do we get a laugh over his participation in a Hendrix College Halloween prank, which came to a precipitate end with the firing of the law's pistol, and which caused Earle to cross with nary a scratch, the accumulated rubbish of a blacksmith yard.



Still the Greatest Mother

COMMITTEES FOR 1939-40

STANDING COMMITTEES

(Appointments expire with annual session of the year indicated.)

SCIENTIFIC WORK—R. B. Robins, Camden, Chairman (1942); Ralph Sloan, Jonesboro (1940); E. C. Moulton, Fort Smith (1941); W. R. Brooksher, Fort Smith (1941).

MEDICAL LEGISLATION—Joe F. Shuffield, Little Rock, Chairman (1940); L. J. Kosminsky, Texarkana (1940); S. J. Allbright, Searcy (1940); Euclid Smith, Hot Springs National Park (1942); W. G. Hodges, Malvern (1942); M. L. Norwood, Lockesburg (1941); W. G. Eberle, Fort Smith (1941).

HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Little Rock, Chairman (1940); A. M. Elton, Newport (1940); C. J. Steed, Gurdon (1942); J. B. Askew, Batesville (1942); E. J. Munn, El Dorado (1941); H. Fay H. Jones, Little Rock (1941).

MEDICAL EDUCATION AND HOSPITALS—S. J. Allbright, Searcy, Chairman (1942); J. W. Amis, Fort Smith (1941); Alan G. Cazort, Little Rock (1941).

PUBLIC RELATIONS—W. T. Wootton, Hot Springs National Park, Chairman (1942); S. C. Fulmer, Little Rock (1940); G. R. Siegel, Clarksville (1941).

MEDICAL ECONOMICS—J. G. Gladden, Harrison, Chairman (1940); T. O. Guthrie, Smithville (1940); J. B. Hesterly, Prescott (1942); A. F. Hoge, Fort Smith (1942); F. A. Corn, Lonoke (1941); Paul Mahoney, Little Rock (1941).

SCIENTIFIC EXHIBIT—C. S. Moss, Hot Springs National Park, Chairman (1941); A. H. Hathcock, Fayetteville (1940); G. G. Woods, Huntington (1942); E. H. White, Little Rock (1940).

NECROLOGY—L. T. Evans, Batesville, Chairman (1941); E. E. Barlow, Dermott (1940); C. A. Archer, DeQueen (1942).

CANCER CONTROL—Fred H. Krock, Fort Smith, Chairman (1940); J. S. Stell, Hot Springs National Park (1942); L. M. Smith, Russellville (1941); F. A. Hughes, Prescott (1942); Jeff Baggett, Prairie Grove (1942).

SPECIAL COMMITTEES

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WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Included in the many activities of next month will be the reorganization of Auxiliary work. Let us each as Auxiliary members feel that we are a part of an organization that not only touches our lives more closely than any club work, but one that can promote the high ideals of our husbands' profession.

With the recent issuance of so much propaganda concerning the medical profession, we must be alert to the fact that we face a problem which we cannot avoid. We, as doctors' wives, must recognize our responsibility, and be able to combat much of the unfavorable propaganda which is being disseminated throughout the nation against the medical profession. Recognizing these facts, we must study intensively these problems which are confronting us. We must be informed, that we, of all people, may be able to answer the many eager questions asked by the laity.

I, as your Legislation Chairman, suggest that each Auxiliary devote one entire meeting, perhaps more, to the study of legislation, and I further suggest that you have this meeting very early in the year that you may acquaint yourselves with some of the more outstanding problems, which may in turn receive your consideration throughout the year.

Our National Legislation Chairman, Mrs. A. A. Herrold, 1166 Louisiana Avenue, Shreveport, made the following observations and suggestions in her article to the January "News Letter":

"Ever since the report of the Committee on the Cost of Medical Care was issued in 1932, more thought has been given to the consideration of this problem in the United States. It was in 1936, however, that the campaign for some radical changes in medical practice began to take on a more definite form. About a year later, in October, 1937, Miss Josephine Roche, the Treasury Department's secretary for health, made an address before a special session of the American Public Health Association entitled 'Medical Care as a Public Health Function.' In effect, she proposed that individual medical care become a function of health departments. Then, in February, 1938, the Interdepartmental Committee released a report which was designed to show the deficiencies in medical care, but none of its efficiencies. Finally, the climax was reached in July, 1938, when the proposals of the Interdepartmental Committee were submitted to the Health Conference at Washington. This is the reason for the call of a Special Session of the House of Delegates (the third in eighty-nine years of the American Medical Association).

"At this session was presented by the Board of Trustees the five chief proposals of the program of the National Health Conference. It was said no formal action would be taken by the Conference; nevertheless, responsible representatives of the government have indicated that these proposals would, in some way, form the basis of the legislation to be submitted to the Congress of the United States when it next meets.

"These proposals briefly are:

Action taken by House of Delegates:

- | | |
|--|---|
| "1. Expansion of public health service. | 1. Recommends the establishment of a Federal Department of Health, with a secretary who shall be a doctor of medicine and a member of the President's Cabinet. |
| "2. Increase of hospital facilities. | 2. Favors the expansion of general hospital facilities where need exists. The hospital situation is such that there is, at present, greater need for use of existing hospital facilities than for additional hospitals. |
| "3. Medical care for medically indigent. | 3. Advocates recognition of the principle that the complete medical care of the indigent is the responsibility of the community, medical and allied professions, and that such care should be organized by local units and supported by tax funds. |
| "4. A general program of Medical care. | 4. Approves the principle of hospital service insurance which is being widely adopted throughout the country. A study of the situation indicates that health needs are not identical in different localities, but usually depend on local conditions, and, therefore, are primarily local problems. Believes it is practical to develop cash indemnity insurance plan to cover, in whole or in part, the cost of emergency or prolonged illness. Agencies set up to provide such insurance should comply with state statutes and regulations to insure their soundness and financial responsibility and have the approval of the county, and state medical societies under which they operate. Not willing to foster any system of compulsory health insurance for a complicated bureaucratic system, has no place in a democratic state. |
| "5. A program for compulsory sickness insurance, covering the entire population of the United States, which means insurance against loss of wages during sickness. | 5. Endorses this principle, as it has distinct influence toward recovery and tends to reduce permanent disability. |

"To facilitate the accomplishment of these objectives, it recommends that a committee be appointed to confer and consult with the proper Federal representatives relative to the proposed National Health Program. This is as detailed as I dare make this, but please read the complete discussion in Proceedings of The Special Session of House of Delegates, published in Journal of the American Medical Association, Sept. 24, 1938.

"It is not expected that the next Congress will pass all five of these proposals. They are going to be submitted a plan which they hope will, some time in the next few years, be adopted in its entirety. Our auxiliary members, therefore, have ample time to study these plans and become conversant with them. Read your husband's Medical Journal and all periodicals that have any articles on Medical Economics, but I believe Dr. Abell's and Mrs. Kech's suggestion is best, namely, 'Organization in all county auxiliaries of groups studying the harmful effects of present social and economic movements upon the practice of medicine.' If it is not practical to have a study group, then devote a part of each of the programs of your monthly meeting to the study of this subject. The American Medical Association has much material that it will gladly send to you. I have sent to each State Chairman of Legislation a little pamphlet entitled 'On the Witness Stand,' and I have more of these on hand, and if you need more, please write me and I shall send them to you. In the Woman's Auxiliary Section of the Kentucky Medical Journal, you will find some valuable suggestions. Study at one meeting the failure that Socialized Medicine has proved to be in Germany, England, and many other places.

"Another good suggestion on how to educate ourselves comes from Mrs. H. E. Rhodehamel, my Regional Chairman of the Western District, who says, 'Start at once to make a file of newspaper clippings, magazine articles, pamphlets being distributed to the public through various organizations, so-called Foundations, etc. You will soon have a host of facts which will enable you to refute many misstatements. Your medical men will appreciate having access to such a file when they are invited to talk before lay organizations or to supply material.'

Listed below are other suggested articles and books, which may offer enlightenment to Auxiliary members to discuss intelligently some of our problems with the public:

"The American Medical Association" of January has an article on the indictment of the American Medical Association by the Federal Grand Jury.

In the February "American Magazine" is an article by a physician, who after years of experience in country practice, returns to the city.

Dr. Henry Ernest Sigerist has an article favoring "Socialized Medicine" in the January 13th issue of "Time."

In a new periodical called "America's Future" Dr. Charles Gordon Heyd writes the first article, "Do You Want Your Own Doctor or a Job Holder?"

The "American Magazine" of January has an article entitled "State Medicine Navy Style."

There is a widely discussed book, "Health Insurance and Medical Care: The British Experience," by Dr. Douglas W. Orr and Jean Orr. Read the "American Medical Association Journal" of December 10, 1938, and February 18, 1939, for information concerning this book.

R. G. Leland, M.D., Director Bureau of Medical Economics, American Medical Association, has written articles on the following subjects:

"Who Chooses Your Physician?"

"The Significance of the National Health Program"

"Confidence in Your Physician"

"Is Medicine to be Socialized?"

"Report of Reference Committee on The Wagner Health Bill"

With the many articles available we should have no trouble arranging our legislation programs. I would suggest that each County President with her Program Committee work out a tentative program on legislation and have ready for consideration at the first fall meeting.

My attention has recently been called to the "Outline for Educational Program for Legislative Committee of County Auxiliaries to the Washington State Medical Association for 1938-1939." This outline seems to be rather broad and interesting. I should like to pass it on, that you may see what other Auxiliaries are doing, and it may offer suggestions to county Auxiliaries for outlines on legislation.

The Outline as used by Washington State Auxiliaries follows:

OUTLINE FOR EDUCATIONAL PROGRAM FOR LEGISLATION COMMITTEES OF COUNTY AUXILIARIES TO THE WASHINGTON STATE MEDICAL ASSOCIATION

Suggested topics for study:

A. STATE OR SOCIALIZED MEDICINE—

1. Define terms—What are fundamental factors?
2. Investigate various Foundations and other sources which are giving financial aid to promote State Medicine.
3. Study and analyze propaganda emanating from: Magazines (often subsidized), School and Community—"Town Hall"—Debates, College Courses and instructors (particularly sociology), Social Welfare Workers, Subversive political and quasi-political groups.

B. FREE CLINICS—USES AND ABUSES—

1. Investigate clinics and hospitals conducted by schools; State, County, City. Clinics sponsored by groups such as P.T. A., Social Service, Junior League, Junior Red Cross, Maternity Homes, etc. Unless we know which groups are doing ethical health work, we cannot be sure which ones to support.
2. Each group to study its own county: What measures are taken to insure that able-to-pay patients are not admitted? Are these activities under adequate medical leadership? Is the doctor paid for his services? Is there a duplication of service?

C. BASIC SCIENCE LAW—

- History.
- Provisions.
- Necessity and difficulty of defending the law.

D. PROPOSED FEDERAL AND STATE LEGISLATION—

1. Study proposals adopted at recent Administration—called National Health Conference. See A. M. A. Journal, July 30, 1938.

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RADIOLOGY—

Harold G. F. Edwards, M. D.

SANITARIUMS (Nervous and Mental)—

Hoye's
Lynnhurst
Dr. Moody's
New Fenwick
Neurological
Norbury
Oakwood
Ralph
Timberlawn
Wallace

Read minutes of special session of A. M. A. House of Delegates, and study proposals adopted. See

A. M. A. Journal, September 24, 1938.

Watch for other legislation pertaining to medical practice and public health which will be presented at coming session of U. S. Congress and our State Legislature.

2. Federal Socialized Medicine Experiment—

Group Health Association,

Federal Clinic Experiment in District of Columbia.

E. OFFICIAL MEDICAL SERVICE BUREAUS—

Claim of state medicine proponents that low-income groups cannot receive adequate medical care is refuted by adequate service provided by Medical Service Bureaus managed and controlled by medical profession.

F. THE HEALING CULTS—

1. History of cultism.

2. Legal Status.

3. Attempts (by initiative and legislation) to—

Repeal or nullify Basic Science Law,

Set up additional schools,

Increase scope of practice permitted,

Force "open door" to hospitals,

Practice under Workmen's Compensation Act.

G. ANTI-MEDICAL PROPAGANDA—

By so-called "Medical Liberty Leagues"; Divine Healing and other Cults, including anti-vivisectionists; anti-vaccinationists;

Disseminated by—Organizations' Publicity Departments; publications; pamphlets; radio talks; "letters to Editors"; advertising, etc.

H. INSTRUCTIONS—

1. Legislative Committee to form nucleus of study group open to all Auxiliary members.

2. Keep file of pamphlets and clippings, pertaining to Medical Legislation for reference.

3. Poll membership on registration to vote.

ALL MEMBERS VOTE!

Mrs. H. E. Rhodehamel,

State Auxiliary Legislation Chairman

Spokane, Washington.

Let me urge each Auxiliary member to cooperate with the efforts of her local legislation program committee. I feel sure that any of the following Legislation Committee Members will be pleased to be of service to you upon request:

Mrs. J. E. Stevenson, Ft. Smith,

Mrs. Decker Smith, Texarkana,

Mrs. T. S. Hare, Crawfordsville.

I wish each Auxiliary a very profitable and successful year in Auxiliary work.

Mrs. Warren S. Riley,

State Chairman Legislation Committee.

BOOK REVIEWS

Medicolegal Phases of Occupational Diseases: By C. O. Sappington, A. B., M. D., Dr. P. H. Pp. 406. Chicago: Industrial Health Book Company, 1939.

With current stress on industrial medicine and occupational diseases and the increasing concern which these fields hold for the practicing physician, this book appears at an opportune time. Every general practitioner should have a knowledge of the fundamental principles of industrial medicine and of the occupational diseases in order that he may properly evaluate these conditions. This volume will be of help in his search.

The Infant and Child in Health and Disease: By John Zahorsky, A. B., M. D., F. A. C. P., Professor of Pediatrics and Director of the Department of Pediatrics, Saint Louis University School of Medicine, and Pediatrician-in-Chief to the Saint Mary's Group of Hospitals, and Elizabeth Noyes, R. N., Supervisor and Instructor of Pediatrics, Children's Hospital, San Francisco. Pp. 496. Illustrated. Price \$3.00. Saint Louis: C. V. Mosby Company, 1939.

This useful text appears in its second edition. All phases of pediatric nursing are comprehensively discussed. Readable and brief, the book deserves a place in all schools of nursing.

Colwell's Daily Log. The Daily Log for Physicians. Price \$6.00. Champaign, Illinois: Colwell Publishing Company, 1939.

Once again we say our little speech recommending the use of this book by all physicians for accurate, simplified accounting. There is no essential change in the 1940 edition over its predecessors; none is indicated. Physicians who try this system of bookkeeping for one year invariably renew and we consider this a true test of its value.

Gastrointestinal Dysfunction: By Barton A. Rhinehart, A. B. (Zoology), M. D. Cum Laude (Indiana), A. O. A., Associate Professor of Roentgenology, University of Arkansas School of Medicine; Consulting Roentgenologist to Saint Vincent's Infirmary, Baptist State Hospital and Arkansas Children's Hospital; Roentgenologist to University Hospital, Little Rock, Arkansas. Pp. 311. Forty-eight plates. Price, \$6.00. Little Rock: Central Printing Company, 1939.

This volume is a comprehensive and exhaustive treatise of functional disorders of the gastrointestinal tract with a full discussion of increased neuromuscular irritability of the alimentary tract, for which the author suggests the logical term, latent tetany. The role of vitamins and sunshine is clearly presented. Human nutritional demands are presented in the light of advanced scientific knowledge of the subject and their relationship to disturbed function of the gastrointestinal tract. Emphasis is placed upon the care required for accurate diagnosis of these dysfunctions. History taking procedure is recounted with detailed suggestions. The importance of roentgen study is stressed. General practitioner, gastroenterologist and roentgenologist alike will find this a valuable book, the full appreciation of which will reward the physician with good results in a class of patients whose care has been uniformly unsuccessful.

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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BOOK REVIEWS—(Continued)

The Vitamins: A symposium arranged under the auspices of the Council on Pharmacy and Chemistry and the Council on Foods of the American Medical Association. Imitation leather. Price, \$1.50 postpaid. Pp. 637. Chicago: American Medical Association, 1939.

So much information has become available about the vitamins, that it is difficult even for experts to keep up with the literature. The present volume is a welcome compendium of authoritative information about these accessory food factors. There are discussions of the chemistry, physiology, pathology, pharmacology and therapeutics, methods of assay, food sources and human requirements of each of the important vitamins. The volume is composed of thirty-one chapters written by experts, and is published under the auspices of the Council on Pharmacy and Chemistry and the Council on Foods of the American Medical Association.

This book should prove to be an indispensable volume for the library of every physician.

Headache and Head Pains: By Walton Forest Dutton, M. D., Visiting Physician to Northwest Texas Hospital; Director, Medical Research Laboratories, Amarillo, Texas. Pp. 301. Price, \$4.50. Philadelphia: F. A. Davis Company, 1939.

This is an exhaustive and able discussion of a common symptom. Treatment is outlined under the various disease etiological factors.

Primer of Allergy: By Warren T. Vaughn, M. D. Pp. 140. Illustrated. Price, \$1.50. Saint Louis: C. V. Mosby Company, 1939.

A most informative little book for the allergic sufferer, certain to bring about a better cooperation between this large class and their physicians. The physician will find this delightful reading.

Athletic Injuries: By Augustus Thorndike, Jr., M. D., Surgeon in the Department of Hygiene, Harvard University; Assistant in Surgery, Harvard Medical School; Associate Surgeon, Children's Hospital, Boston. Pp. 208. 104 illustrations. Price \$3.00. Philadelphia: Lea and Febiger, 1938.

This book, issued in the form of a manual, is a most concise treaty on athletic injuries. The experience of the authors in handling the Harvard athletic teams and the excellent records they have kept are invaluable to any medical man dealing with athletes. The tables showing the type of injuries are most interesting. The lessened periods of disability experienced by these men, undoubtedly due to their excellent supervision and control, is better than the experience in private practice and sets a goal for the private practitioner. Of particular importance to the man doing surgery and the general practitioner are the two chapters on strains and sprains. To the average surgeon and general practitioner who handles most of these conditions, the diagnosis of strains and sprains has been more or less haphazard, based on history, pain and swelling and lack of bone injury on X-ray, and treatment by most people is cor-

respondingly haphazard. I believe the anatomy and pathological explanation for the treatment in these two chapters alone would be a revelation to most practicing surgeons, and if the book contained nothing but these two chapters, it would be well worth while and should be in the library of every man practicing medicine or surgery.

Operative Orthopedics: By Willis C. Campbell, M. D., Memphis. Pp. 1154. 845 illustrations with 4-color plates. Price \$12.50. Saint Louis: C. V. Mosby Company, 1939.

The appearance of this book fills a great gap in modern orthopedic literature. Your reviewer cannot express the opinion of an orthopedic surgeon, but certainly from its well written contents, it should make a marvelous reference book even for that. But in this day and age of good roads, high speed automobiles and the whip-up in industry, every physician is compelled to treat fractures. Undoubtedly the majority of fractures in the country are treated by general surgeons, as many of the communities have no orthopedist. No other book that has ever been written so clearly sets forth the operative procedures in the methods of handling fractures as does this one. The author with his vast experience and ability to express himself has clearly put forth all steps of operative treatment. In his gracious manner he has sent backwards in expressing the views of others and giving full credit to other surgeons as to technique and opinions. No other book we have seen so well answers the purpose of a working manual and a reference book with excellent bibliography. It should be in the hands of at least every man who treats fractures; certainly in the hands of every general surgeon, both for its excellent presentation of the usual things and the higher specialized procedures of the trained orthopedics.

Personal and Community Health: By C. E. Turner, A. M., Sc. D., Dr. P. H., Professor of Biology and Public Health in the Massachusetts Institute of Technology, etc. Fifth edition. Pp. 652. 127 illustrations. 4-color plates. Price \$3.00. Saint Louis: C. V. Mosby Company, 1939.

Five editions testify to the value of this work in its special field, hygiene for the college student. The author has handled the subject well.

Do You Want to Become a Doctor? By Morris Fishbein, M. D., Editor, The Journal of the American Medical Association and of Hygeia. Pp. 176. Price \$1.50. New York: Frederick A. Stokes Company, 1939.

This book is a well-written, authoritative guide for the youth who wishes to study medicine. The necessity for selecting the proper school for pre-medical training, the advisability of continuing this training beyond the required period of two years, the choice of a medical college, the internship, licensure, and all related problems are fully discussed. The cost of the medical school years is itemized. This information, so essential to one who would enter upon the practice of medicine, has not previously been assembled in compact form. Its presentation by Fishbein guarantees reliability and general excellence.

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No. 7

THE PROLONGED FIRST STAGE OF LABOR*

LOUIS RUDOLPH, M. S., M. D., F. A. C. S.,†
Chicago

The management of a prolonged first stage of labor is, as yet, one of the major obstetrical problems confronting the medical profession. The prolonged first stage of labor is primarily due to a disturbance of the physiology of the uterus. The lack of a definite understanding of the physiological factors causing the prolonged first stage of labor leads to hasty operative interference with the resulting increased fetal and maternal morbidity and mortality. The publicity that labor can be shortened by modern methods brings demands from the expectant mothers with the result that operative

interference is resorted to with disastrous results to both mother and child. The conservative management based on the physiology of the uterus, a definite diagnosis throughout the labor, and the proper management of the mental and physical state of the parturient will be safer for the mother and child.

The primary aim of medicine is the attempt to correlate the clinical facts to the basic sciences, but if we cannot correlate them we must rely on our clinical experience. Therefore, I will discuss this subject under the following: (1). The physiology of the uterus in labor. (2). The diagnosis of the position and presentation and the cephalo-pelvic relation. (3). The treatment of the prolonged first stage of labor.

(1). The physiology of the uterus is labor. The unit of work or the anatomical physiological changes of the uterus in labor is dependent upon a uterine contraction. The uterus with the onset of normal labor is physiologically divided into

* Read before the sixty-fourth annual session of the Arkansas Medical Society, Hot Springs National Park, May 10, 1939.

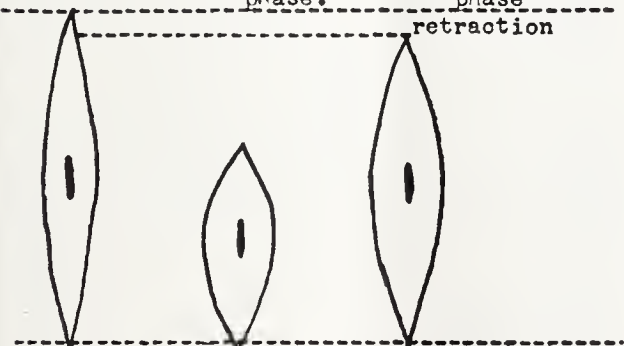
† From the Department of Obstetrics and Gynecology, Loyola University School of Medicine, and the Department of Obstetrics, Cook County Hospital.

FIGURE I

THE PHYSIOLOGY OF A UTERINE CONTRACTION

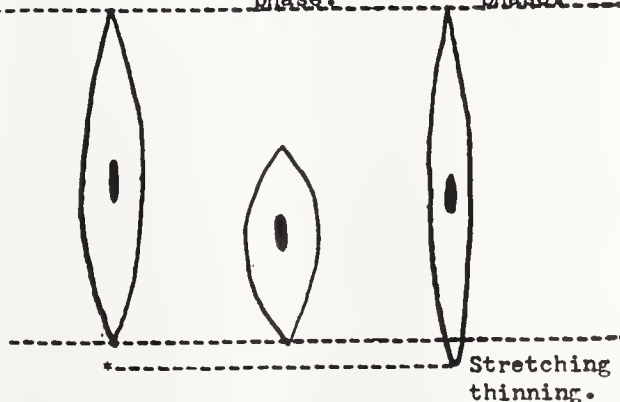
Upper Uterine Segment.

I. At Rest. 2. Contraction phase. 3. Relaxation phase retraction



Lower Uterine Segment.

I. At Rest. 2. Contraction phase. 3. Relaxation phase



The upper uterine segment contracts to expel and retracts to hold the progress made by the succeeding contraction.

The lower uterine segment relaxes to receive and to provide a passage, but normally it ceases to relax after the cervix has been completely effaced and dilated. After separation of the placenta the lower uterine segment undergoes retraction in the same manner as the upper uterine segment after the expulsion of the fetus and the placenta.

an upper and a lower uterine segment. With the physiological retraction ring as the junction between the two uterine segments. The upper uterine segment is the more active segment and manifests the property of becoming thicker with each uterine contraction. The lower uterine segment is the so-called passive segment and manifests the property of thinning or stretching with each uterine contraction. The anatomical physiological changes of the uterus in labor into an upper and a lower uterine segment are synchronous with the property of thickening of the upper uterine segment and the property of thinning or stretching of the lower uterine segment which occurs with each uterine contraction.

A uterine contraction is the basis of the anatomical physiological changes of the uterus in labor of an upper and a lower uterine segment, the formation of the physiological retraction ring (contraction ring of Schroeder or the retraction ring of Barbour and Lusk), and the obliteration of the internal os and dilatation of the external os. A uterine contraction consists of a synchronous contraction of the upper and the lower uterine segments which is the contraction phase that may last for from 20 to 60 seconds. When the contraction phase is over the upper and the lower uterine segments manifest relaxation, but before this relaxation or the relaxation phase is completed the upper and the lower uterine segments undergo different physiological changes until the resting phase or the interval between uterine contractions occurs as follows:

- The upper uterine segment undergoes some permanent shortening or brachystasis (retraction).
- The lower uterine segment undergoes some thinning or stretching or mecystasis. When each uterine contraction undergoes the different physiological changes, we are able to appreciate the anatomical physiological changes of the gradual thickening of the upper uterine segment, and the thinning or stretching of the lower uterine segment which is the physiology of a **TRUE UTERINE CONTRACTION**. As these anatomical physiological changes of the upper and the lower uterine segments occur the junction between the two uterine segments is characterized by a tapering of one segment into the other which tapering junction is the physiological retraction ring. The physiological retraction ring is present in the uterus of every normal labor, and at the beginning of the second stage of labor is found 6 to 8 cm. above the superior border of the symphysis pubis.

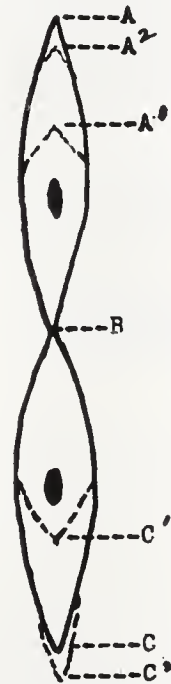
With each uterine contraction the cervix uteri undergoes a synchronous dilatation in the following manner: First, the internal os undergoes a coordinated dilatation in harmony with the degree of thickening or brachystasis of the upper uterine segment, some thinning or stretching or mecystasis of the lower uterine segment, and some rising of the physiological retraction ring which is referred to as the obliteration of the internal os or effacement. Second, with the obliteration of the internal os the continued uterine contractions brings about the dilatation of the external os. When the second stage of labor is reached the anterior cervical lip is drawn upward against the middle and the posterior surface of the symphysis pubis, while the posterior cervical lip is drawn backward and upward against the anterior surface of the sacrum to about the region of the third sacral vertebrae.

In a prolonged first stage of labor the outstanding diagnostic sign is the delayed cervical dilatation. On the basis of the physiology of a uterine contraction it is essential to determine the physiology of the delay in the cervical dilata-

FIGURE II

THE PHYSIOLOGY OF A UTERINE CONTRACTION

The basis of uterine changes during labor is dependent upon a uterine contraction of the longitudinal and transverse muscle fibres.



- I. Phases of a Uterine Contraction:
 - A. Upper Uterine Segment.
 1. Contraction phase, $A^1 B$.
 2. Relaxation phase, $A^2 B$.
 3. Retraction or Brachystatic phase, $A A^2$.
 4. Resting phase or the interval between the uterine contractions.
 5. No retraction or brachystasis phase. False uterine contraction.
 - B. Lower Uterine Segment.
 1. Contraction phase, $C^1 B$.
 2. Relaxation phase, $C^2 B$.
 3. Stretching or thinning, or Mecystatic phase, $C C^2$.
 4. Resting phase or the interval between the uterine contractions.
 5. No stretching or thinning, or mecystasis. False uterine contraction.

The physiological junction between the upper and the lower uterine segment is called the Physiological Retraction Ring, or the contraction ring of Schroeder, or the retraction ring of Barbour and Lusk, or the physiological ring of Bandl. The term Ring of Bandl is wrong for the normal physiological junction between the two uterine segments.

tion in spite of the fact that the parturient manifests uterine contractions. We will designate a uterine contraction in which the upper uterine segment undergoes some thickening or brachystasis, the lower uterine segment some thinning or stretching or mecostasis, and some dilatation of the circular fibres of the cervix uteri which bring about the anatomical physiology of the uterus in labor as a **TRUE UTERINE CONTRACTION**. But, if uterine contractions are present, but the cervical dilatation is arrested, or intermittent, or delayed, we can accept the premise that some of the uterine contractions have no thickening or brachystasis of the upper uterine segment, no thinning or stretching, or mecostasis of the lower uterine segment, and no dilatation of the cervix uteri. The physiological retraction ring will not rise. Therefore, the uterus manifests no anatomical physiological changes in which these contractions is designated as a **FALSE UTERINE CONTRACTION**.

The physiological concept of a uterine contraction explains the clinical manifestations of the cause for the prolonged first stage of labor. It is well known that some weeks before term a pregnant patient may have uterine contractions for many hours with no cervical dilatation. The uterine contractions stop, no cervical changes, and the patient goes on to term, so we make a diagnosis of False labor. Then again, a patient at term may have uterine contractions for many hours with no cervical dilatation; and then go into active labor which is manifested by the degree of cervical dilatation; and again for some hours the cervical dilatation is arrested. This condition may go on intermittently for from 24 to 100 hours before the second stage of labor is reached. These are examples of false uterine contractions as the cause of the periods of arrested cervical dilatation to explain the physiology of the prolonged first stage of labor. Now, Braxton-Hicks intermittent uterine contractions are painless, intermittent, uterine contractions occurring during the pregnant state, but when false uterine contractions occur close to term, we may call them painful Braxton-Hick's uterine contractions, because the underlying physiology is the same for both. A prolonged first stage of labor can be further explained on the physiological basis that the uterus undergoes periods of false and true uterine contractions. This physiological concept of false or true uterine contractions appears to me to be more scientific than the use of the term inertia uteri.

The differential diagnosis between false and true uterine contractions is determined by the

state of the cervical dilatation. Rudolph and Ivy (2) have concluded that the cervix uteri is the barometer of the anatomical physiological of uterine changes. It is important to understand the premise that the cervix uteri is only a part of the uterus, and the cervical dilatation is the index of the anatomical physiological occurring with a uterine contraction of the uterus as a whole. The physiological criteria of a uterine contraction have a very important clinical value in a prolonged first stage of labor in denoting the concept of false and true uterine contractions. Further, on the basis of the physiology of the uterine contractions we can feel certain that the normal uterus will not rupture spontaneously during a prolonged first stage of labor. A spontaneous rupture of the uterus can only occur during the first stage of labor in a normal uterus when it is complicated by pressure necrosis which is due to an abnormal direction of the presenting part against the lower pole of the uterus in relation to the bony pelvis, so the constant impact with the uterine contractions will traumatize a part of the uterus leading to ischemia of that part of the uterus. This type of rupture of the uterus is met with in the following, asynclitism, hydrocephalous, a high head with a normal cephalo-pelvic relation, but the fetal head is misdirected against the lower pole of the uterus at some part of the pelvic inlet, and occasionally in cephalo-pelvic disproportion.

The diagnosis of the cephalo-pelvic relation, position and presentation, and the mental and physical state of the parturient is imperative in the management of a prolonged first stage of labor. The diagnosis will determine the conditions present which will indicate our treatment at the proper time. The diagnosis is not constant, but rather a transitory diagnosis applicable only to the time when the examination is made. The diagnosis will be discussed under (1) prenatal supervision, and (2) labor diagnosis.

1. Prenatal Supervision. An early diagnosis is made to determine the normanity of the pelvis by pelvimetry, or roentgenogram. A vaginal examination is made to determine the configuration of the uterus, and pelvic neoplasms.

At the 36th week of pregnancy a diagnosis is made of the cephalo-pelvic relation, and position and presentation. The cephalo-pelvic relation is determined by pelvimetry, roentgenogram, or the Hillis impression method. If the fetal head is high, we must realize the possibility of malposition and malpresentation is far greater than when the fetal head is engaged, and examinations are made as necessary before

the onset of labor. A normal sized fetal head at the 36th week of pregnancy may become oversized by the time of the onset of labor which may lead to a possible cephalo-pelvic disproportion.

During our prenatal supervision, we cannot prognosticate abnormal uterine contractions causing a normal or a prolonged first stage of labor. The expectant mother should be prepared for a possible prolonged labor, rather than the expectation that her oncoming labor will be a very rapid one. It is the unexpected first stage of labor which perturbs a parturient. We need her cooperation in a prolonged first stage of labor.

Labor Diagnosis. As soon as possible after the onset of labor, and during labor the diagnosis made during the prenatal supervision should be re-affirmed or changed. All the previous diagnosis are transitory which re-affirmation or change of the diagnosis will prevent some pitfalls in the management of the parturient.

The uterine function is determined by the results of the uterine contractions. Abnormal uterine contractions bring about abnormal uterine physiology and interfere with the mechanism of labor when a prolonged first stage of labor complicates a labor. This will become manifested by a dystocia syndrome as follows: (a). Prolonged labor. (b). Cervical dilatation is delayed or slowed. (c). Internal anterior rotation of the fetal head is arrested or delayed. (d). Atypical uterine contractions. (e). Functional malformations of uterus are frequently present as, lateral obliquity and sacculations of the uterus, and constriction rings. The dystocia syndrome is primarily due to a disturbance of the normal physiology of the uterine contractions or pathological physiology of the uterine contractions or uterine dysfunction.

A prolonged first stage of labor is due to the premise that the uterine contractions are false or in a pathological physiological state which does not bring about the normal uterine changes. The false uterine contractions per se not functioning in a normal manner disturb the normal mechanism of labor. The dystocia syndrome of a prolonged first stage of labor is due to a pathological physiology of the conducting mechanism of the uterus. It is important to note that in the majority of prolonged labor that the normal mechanism of labor results in that the normal movements of the mechanism of labor have taken place, but each movement is prolonged.

For clinical purposes, the diagnosis in prolonged labor is divided into functional and mechanical dystocia. A functional dystocia is one in which we have a normal cephalo-pelvic relation, position and presentation, and the dystocia syndrome. A mechanical dystocia is one in which we have a cephalo-pelvic disproportion, border-line or absolute malposition, or malpresentation, or pelvic neoplasms, or a prolapsed abdominal viscus which prevents the passage of the fetus through the pelvic cavity. A mechanical dystocia may be complicated by a functional dystocia, and vice versa.

Prognosis. The prognosis of a prolonged first stage of labor is dependent upon our appreciation of functional dystocia. The basis of the dystocia syndrome is based upon a pathological physiology of the uterus in labor. We do not know the cause of the onset of labor, nor the regulatory mechanism of the uterus in labor, so our management of a prolonged first stage of labor must be empirical. We have no method, at the present time, whereby we can hasten cervical dilatation, nor a more rapid mechanism of labor, therefore, we cannot change an abnormal physiology of the uterus to a normal physiology. The recent increased operative furore has increased our maternal and fetal mortality. Conservatism based on intelligent expectancy is, as yet, the safest way of managing a prolonged first stage of labor. It is important to realize that a prolonged labor with the bag of waters intact may have the uterine cavity potentially infected.

The conservative management of functional dystocia will give us the lowest maternal mortality, but a fetal mortality of about 10%. It is essential to recognize that a 3.5% gross fetal mortality is considered good obstetrical management. If, therefore, we accept a 10% fetal mortality in our prolonged first stage labors, we will find the end result of this management will still give us 3.5% gross fetal mortality, but the maternal mortality will not be increased. At the Cook County Hospital I have recently managed 69 cases of prolonged first stage labors with no maternal mortality, and a fetal mortality of 13%. This fetal mortality may appear high, but considering the type of service, I consider the results as excellent in view of the fact that we had no maternal mortality. I wish to call your attention to the fact that of these 69 cases only one Caesarean section was done which was a mechanical dystocia that was not recognized earlier, but then we had a living mother and child. I will indicate below in prolonged labors that by the time that the diag-

nosis is made the conditions present are not favorable for delivery from above. In private practice my fetal mortality is about 2%, so that I feel that in a general way it is safer to accept a 5% fetal mortality in this small group of prolonged labors.

The functional dystocia to be discussed will be the occiput anterior and posterior. Experiences teaches us that both the anterior and posterior positions are equally complicated by prolonged first stage of labor. A brief discussion of the occiput positions will be given.

The confusion present is mainly found in the designation of the occiput posterior. The fear of the so-called occiput posterior position is in my opinion greatly exaggerated in its importance. The occiput posterior position will be divided into two types, the normal occiput posterior position and the persistent occiput posterior position. The normal occiput posterior position is one in which at the onset of labor the occiput is found in an oblique diameter and occiput posterior. The cervical dilatation goes on in a normal manner, in utero the fetal head is rotated into an anterior occiput position. The delivery is the same as an anterior occiput position. In this normal occiput posterior position the duration of the labor is on the average a few hours longer than the anterior occiput position which is accounted for by the internal anterior rotation of the occiput of 135%.

The persistent occiput posterior position that I will discuss is one in which the pelvis is ample. The occiput is found in an oblique diameter and posterior. The fetal head is found in a first degree deflexion. The point of direction becomes the sinciput. I believe the first degree deflexion associated with the persistent occiput posterior position is primarily due to the fetus itself which is based on the fetal postural mechanism (3). The uterine contractions are characterized by a disturbance in which many of the uterine contractions are of the false variety. Owing to the uterine dysfunction, the cervical dilatation is prolonged. The point of direction of the presenting part which is the sinciput comes in contact with the pelvic floor, or rather the first degree deflexion attitude of the fetal head prevent a point of direction coming in contact with the pelvic floor, so internal anterior rotation of the fetal head is arrested or delayed. At times the fetal head flexes so the point of direction becomes the occiput and coming in contact with the pelvic floor is rotated some degree anteriorly. The intermittent internal an-

terior rotation of the fetal head goes on until the second stage of labor is reached. When the second stage is reached we may have three results as follows: (a). With the prolonged second stage of labor the fetal head is gradually rotated anteriorly in which we may have a spontaneous delivery or assist the delivery by forceps. (b). The fetal head may become arrested in the posterior position in which after a prolonged second of labor the indication may arise for immediate delivery on account of the mother or child by manual rotation and forceps, version or extraction, or by the Scanzoni maneuver. (c). Owing to a second degree deflexion of the fetal head the point of direction becomes the sinciput which comes in contact with the pelvic floor to be rotated anteriorly to result in an occipito-sacral position. (d). The sagittal suture is arrested in the transverse diameter of the pelvic with the occiput to the right or left. This is the so-called transverse arrest. Indications for mother or child may arise which will necessitate immediate delivery by manual rotation and forceps, version and extraction, or by cephalic application of the forceps and delivery.

As we review our experience of the persistent occiput posterior position we find about 90% will rotate anteriorly, 2% remain as occipito-sacral positions, while the 8% will remain as persistent occiput posterior positions which will demand operative delivery. Further, persistent occiput posterior position with an ample pelvis is a functional dystocia when prolonged, but when a persistent occiput posterior position is complicated by a cephalo-pelvic disproportion, or malformation of the fetus, or pelvic neoplasms, we are dealing with a mechanical dystocia which is treated according to the conditions present.

Breech presentation may be complicated by functional dystocia. The breech per se does not lend itself to functional dystocia, because in my series of 69 cases of prolonged labors, we found only 4 breeches or 0.6%. The breech presentation just as the vertex presentation is liable to be complicated by uterine dysfunction and the dystocia syndrome.

TREATMENT. The treatment of the prolonged first stage of labor is based upon the diagnosis. Upon examination a diagnosis is made of either a functional or a mechanical dystocia.

The mechanical dystocia is divided into an absolute and a border-line type. The absolute mechanical dystocia is specific in its treatment by an elective Caesarean section. The border-line mechanical dystocia is treated according

to one's experience by electing to deliver from above or from below. The border-line mechanical dystocia if elected to be delivered from above should be by an elective Caesarean section. But, if we elect to deliver from below it is essential to realize that in this type of case moulding is essential which is a second stage labor. I have expressed the opinion that the test of labor should be second stage of labor, bag of waters ruptured, and some hours of labor which is called the anatomical physiological school (4). Now, it is essential for us to bear in mind that even a border-line mechanical dystocia may be complicated by functional dystocia so if we elect to deliver from below Caesarean section is practically ruled out. I will express below that conservative treatment usually rules out Caesarean section.

When a diagnosis is made of functional dystocia, it is essential to bear in mind that it may change to a mechanical dystocia at any time, so we should examine the parturient as required in order to be positive of our diagnosis at all stages of the labor.

The basis for the treatment of the prolonged first stage of labor is the PREVENTION OF MATERNAL EXHAUSTION. Maternal exhaustion is based on inanition, dehydration, the loss of sleep or rest, and the hysterical state of the parturient will work herself into, if she is not mentally prepared for a possible prolonged labor. What is a normal labor? Denman expressed an opinion that 24 hours of labor should be considered as the normal duration of labor which is practically the accepted premise today. It appears to me that this rule is not a safe one, and is probably the cause of the increased operative furore. It is true that many parturients will deliver within 16 hours, but a labor may even be normal if the so-called duration of the labor is from 30 to 100 hours. It is a fairly common experience to have patients at term manifest false uterine contractions for from 24 to 36 hours characterized by no cervical dilatation. Then true uterine contractions set in for a normal labor. Or, a parturient will dilate the cervix to 5 cm. which is followed by intermittent periods of false and true uterine contractions when the second stage of labor will be reached in from 30 to 100 hours. It is well known that false labor may occur at the 7th or 8th month of pregnancy which will subside and the patient will go into labor at the expected time. On the same underlying pathological physiology a patient at term may begin

her labor with false labor which after a varying period go into true labor.

A labor is considered prolonged when at the end of 18 hours from the onset of labor the degree and progress of the cervical dilatation leads to the diagnosis that the labor will not be completed before another ten hours. This is the TIME to anticipate MATERNAL EXHAUSTION. I assume the premise that every pregnant woman has certain prodromata of labor which occur at least 10 to 12 hours before the onset of labor. During this prodromal stage the patient may be mentally perturbed and may not partake of the normal amount of food or drink. When the patient enters the hospital she is potentially exhausted. If the labor is of normal duration the state of exhaustion will not become manifest; but if the labor should continue over 18 hours and if it appears that the labor will require 10 or more hours, then the state of exhaustion must be prevented, and the treatment instituted.

THE MEDICAL REGIME OF EXHAUSTION. At the end of 18 hours the urine is tested for acetone, and the test repeated every 12 hours. The diet, soft or liquid, should consist of 3,000 calories of food rich in carbohydrate, and 2,000 cc of water for each 24 hours of the labor. The parturient should be fed every three or four hours. With persuasion the parturient will cooperate. The parturient should receive sufficient sedation to ensure at least 8 hours rest or sleep for each 24 hours that she is in labor.

Diet. The parturient should be fed every 3 or 4 hours of either a soft or liquid of about 300 to 400 calories. The parturient being in labor has an increased katabolism which is combatted by food and water to prevent acidosis. It is essential to begin feeding the parturient early in order to anticipate the state of hysteria which may be manifested, when the parturient will cooperate for the prolonged labor.

Water. The diet and the exhibition of water should equal at least 2,000 cc. In prolonged labors unless the parturient receives sufficient water the parturient will manifest dry skin and dry vaginal mucous membrane, so that the state of the skin is an index of the state of water balance.

Sedation. The basis of rest or sleep during a prolonged labor is a 24 hour period. At the end of 18 hours attention is paid to food and water. As soon as the parturient shows signs of restlessness I aim to give the parturient 4 hours of rest or sleep. I aim to wait 8 hours after a period of sedation for the purpose of

feeding the parturient. If at the end of 8 hours and the parturient appears to be fatigued, I give another course of sedation providing it appears that the delivery will occur not within four hours. This principle of 4 hours rest and 8 hours of awakeness for the purpose of feeding the parturient is maintained until the second stage of labor is reached. The method of sedation depends upon each individual accoucheur. The method I use in my practice is the intermittent use of semi-narcosis and analgesia.

1. Semi-narcosis. This will depend upon the state of the parturient for if mild I will give morphine sulfate gr. 1/6 and scopolamine gr. 1/200, and repeat the scopolamine only in 45 and 90 minutes. At times only one repeated dose of the scopolamine is necessary. If the parturient is greatly disturbed I will give morphine sulfate gr. 1/4 and scopolamine gr. 1/150, and repeat the scopolamine gr. 1/200 in 45 minutes, and if necessary another scopolamine gr. 1/200 at the end of 90 minutes. After a course of semi-narcosis I may repeat it or use an analgesia.

2. Analgesia. This is for mild cases. Codienae sulfate gr. 1/2 and luminal gr. ii, and repeat as necessary. Morphine sulfate gr. 1/6 to 1/4 as necessary. Intramuscular injection of morphine sulfate gr. 1/6 to 1/4 with 2 cc of solution of magnesium sulfate (50%), and 2 cc of the magnesium sulfate is repeated when the effect seems to wear off; the magnesium sulfate may be injected 2 or 3 times. Recently I have used spasmalgin (Hoffman-La Roche) two or three ampules for 4 hour periods with good results.

The duty of the accoucheur is also important. In a prolonged labor we have to assure the parturient, the family, and frequently ourselves. We must assure the parturient that all is well, except that the uterus is functioning in a "sluggish" manner. That we will have to await the complete dilatation of the cervix before we can aid her by ART. This reasoning will nearly always assure the parturient and her family, and if the accoucheur is convinced of this himself, he will not resort to operative interference during the first stage of labor, except in rare instances. By a proper attitude on our part of the appreciation of the functional dystocia, most functional dystocia can be carried along with gratifying results.

The conservative management of a parturient until the second stage of labor is reached may require anywhere from 24 to 100 hours of which

I am convinced will give the best results to the profession as a whole. However, one must be alert and diagnose any complication that may arise to endanger either the mother or child upon which the indication will be carefully be decided upon.

Interference during a prolonged first stage of labor. It is readily recognized that delivery during the first stage of labor is fundamentally unsound. Yet, it can be debated that conditions of the mother or child may indicate immediate delivery. In my experience, I have rarely met with a case in which the maternal conditions indicated delivery during the first stage of labor. Fetal conditions may arise in which unless the child is delivered the child will perish. This leads to the examination of the condition of the genital tract and the fetus during a prolonged first stage of labor."

When a diagnosis is made of a functional dystocia the labor has usually progressed close to 24 hours. I found in my series of prolonged labors the bag of waters was ruptured at the end of 18 hours in 27 or 39%. This will indicate that the uterine cavity is potentially infected in these 39%. If the bag of waters is intact and the labor is prolonged it is also probable that the uterine cavity is potentially infected by the bacteria ascending upward through the intact membranes to infect the uterine cavity. It may be postulated that each hour after the rupture of the membranes the bacteria multiply in utero. The parturient may be exhausted. The prolonged labor may cause some injury to the fetus. Operative interference during a prolonged first stage of labor will consist of Caesarean section, and in some cases necessitate a Porro Caesarean section, or Duhrssen's incisions followed by version and extraction or forceps delivery with the potentiality of sepsis, maternal hemorrhage, serious injury to the child.

A review of Caesarean section of the past five years demonstrates that it carries a high mortality. Cross country it still carries about a 15% maternal mortality and at least a four percent fetal mortality. The only so-called safe Caesarean section is the Caesarean section by election. In a prolonged labor the Caesarean section is always a late operation with conditions that is too dangerous for the mother. Then if we are dealing with primiparous parturient with a potentially infected uterus if Caesarean section is performed for the sake of the child, it should be followed by an abdominal supravaginal hysterectomy. This is a high price

for the primiparous women to take, particularly if in addition we may lose the child. I believe that Caesarean section is rarely indicated in a prolonged labor of the functional dystocia variety.

Duhrssen's incisions is just mentioned in order to indicate its dangers. Duhrssen's incisions is an expert operation which should be attempted only in maternity hospitals. It is dangerous to the mother from sepsis, shock, and hemorrhage.

Summarizing. A prolonged first stage of labor is due to a functional dystocia. When the diagnosis is made we should indicate early whether we will deliver from above or below. When the course selected is from below we should await the second stage of labor and then be governed by the conditions present for the delivery. This conservative management is still the safest for the mother and child in spite of the advances made in obstetrics. The acceptance of a fetal mortality of about 5% of our gross fetal results will be most satisfactory for the expectant mother and the medical professional. From the days of Smellie to the present we have not improved our management of prolonged labor, except that modern aseptic technique has markedly lowered the incident of puerperal sepsis, and the modern therapy of sedation avoids the frightful state of maternal dread of labor in general.

55 East Washington Street.

NOW IS THE TIME

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OBSTETRICS IN THE SMALL HOSPITAL*

JOHN H. WILSON, M. D.
Magnolia

It is not the purpose of this paper to give a perfectly illuminated idea of physiological reproduction of the human species, assisted by an expert obstetrician, but rather to reproduce to you a few humble ideas of work, technique and results of one hundred sixty rural obstetrical cases in the twenty-five bed and four bassinett Dyess Colony Hospital.

I realize that the majority of you doctors have delivered more babies, under all types of adversities and complications, than I have attended, or probably ever will deliver, but the practice of obstetrics at Dyess Colony is rather unique, due to the fact that we are dealing with a previously debilitated class of women who are becoming educated to the benefits of prenatal care, and having their babies in a completely equipped small hospital, under aseptic methods, ready at all times to meet any emergency or unforeseen complication of labor.

Said Colony is composed of approximately four hundred fifty (450) families, or twenty-five hundred population, and roughly speaking, one-fourth of the women are pregnant all the time. Since this is a controlled practice, we do all the medical and surgical care of these people, and obstetrics is forging ahead today in the race of medical specialization. As will be seen, this field of medicine is no place for a midwife or indifferent and incompetent doctor. Hence one can well agree with Paul Titus who says, "Scientific obstetrics is a highly specialized branch of surgery."

To cover the three trimesters of prenatal, delivery and post-natal care of pregnancy and purperum in all their deviations and idiosyncrasies would require several volumes, therefore I will try to confine this paper to our routine obstetrical care, and treatment of complications as they occur in each trimester of pregnancy, as followed in Dyess Hospital.

At this time 95% of our patients are seen in the Out-Clinic Department within ten weeks after conception. Each patient is given a complete physical examination and blood Wasserman test for detection of systemic or local diseases, which are eradicated if possible. A prenatal chart is made of this patient, and pelvic

* Read before the sixty-fourth annual session of the Arkansas Medical Society, Hot Springs National Park, May 10, 1939.

measurements recorded. Particular interest is given to her weight, heart and kidney function, and pelvic dimensions. Avitaminosis is always a question in this type of patient, hence, she is advised as to her diet and habits from the beginning of pregnancy.

Twenty to twenty-five pounds of weight is the maximum that she will be allowed to gain during pregnancy. That undue gain in weight is associated with increased danger of toxemia has been proved by a number of clinics. Jeans and Stearns of Iowa University, Bauer, Aub, and others have shown that with a subminimal intake of calcium and phosphorous is unable to conserve said minerals for the need of herself and fetus, therefore, our patients are advised to drink one quart of milk daily, with an addition of some form of Vitamin D to aid calcium metabolism. If there are no complications, the expectant mother is given a sterile urine specimen bottle and requested to report monthly for a periodic check of her condition, up to the sixth month.

The more important complications in this report during the first two trimesters of pregnancy are as follows:

1. Malaria

Since 90% of the people are subject to malaria in Mississippi County, the people of Dyess are no exception. Fifty-six pregnant women were treated for chills and fever of malarial origin, using quinine and atabrine in 20 and 36 cases respectively, without causing abortions or any serious effects. My choice of drug is atabrine, because it does not cause tinnitus, vertigo, or uterine contraction, nor does it affect the eighth nerve of the fetus, and the patient will take it without fear of abortion.

2. Salpingitis and Appendicitis

One case recognized and treated conservatively as such. After temperature and blood count receded, a laparotomy was performed, one tube and appendix removed during the fourth month of pregnancy, and the patient went to term.

3. Dementia Praecox

One eighteen-year-old girl transferred to State Hospital during third month of pregnancy, and authority given to use Metrazol shock treatment. The patient returned to the Colony mentally clear, and gave birth to full term baby.

4. Hyperemesis Gravidarum

Practically all of the cases were treated for hyperacidity of stomach and early morning nausea, or some form of mental aversion, but only two cases became so toxic as to require hospitalization and isolation.

A. These two cases were given one cc. of Corpus Luteum extract, (3 gr. dessicated Corpus Luteum) daily for seven days, then three times weekly. Dextrose 10% solution in saline was given as needed for nourishment and dehydration. Vitamin B-1 was given to aid carbohydrate metabolism and combat the development of polyneuritis.

Tell of Boston states that hyperemesis is a treacherous disease, and the patient may pass suddenly into a dangerous state. Repeated tests should be made for evidence of muscular paralysis and loss of reflexes, so that the onset of polyneuritis may be detected. If there is a steadily rising pulse, which remains above 110, or if there are continuous vomiting, jaundice, albumin and casts in the urine, interruption of pregnancy is essential.

5. Abortions

According to DeLee, 600,000 abortions occur annually in the U. S., and probably 10,000 women die each year as a result. Taussig of St. Louis states that about one third of these abortions are spontaneous, and two-thirds induced. We are forced to treat dozens of cases of uterine bleeding, by dilation and curretment, and the findings are embryonic decomposed tissues which leaves no doubt of self-induced abortions in the homes. However, only five cases came to the hospital for threatened abortions that were made a matter of record. Three cases occurred in the third month of pregnancy and two in the fifth month.

6. Infantile Uterus

One case gave a history of two abortions during the third month and was told by three doctors that she would never carry a pregnancy to term. She was given 2,000 units of Theelin (estrin) daily for two weeks immediately after conception, gradually decreasing the dosage to 2,000 units per week through the seventh month. The patient went to term and delivered a seven pound baby.

Upon reaching the seventh month of gestation the expectant mother is requested to report

to the clinic every two weeks for urinalysis and check. It is in the last trimester of pregnancy that hereditary and contracted debilitated physiologic organs of the mother begin to show strain and danger from her pregnancy. If she has been guided through the first six months correctly, the complications of the last trimester are greatly diminished. When our patient's weight suddenly rises and her blood pressure begins to ascend, she is advised to go to bed on a liquid salt-free diet, and partake freely of magnesium sulfate water. Under this regime we have not recognized any low reserve kidneys, eclampsia, or serious late toxemias of pregnancy in this series of cases. The only complication to be mentioned here is one case of premature labor at the seventh month, of which we have no exact explanation. Other complications of this trimester will follow under the subject of labor, etc.

When our patient has reached the end of pregnancy and first stage of labor has been established, the ambulance is called and she is brought to the small hospital, where she visits the bath room first, and is given a hot tub bath. From here the expectant mother is carried to the labor room adjacent to the delivery room, and prepared by shaving the perineum, washed with tincture of green soap, and given a soap-suds enema until it returns clear. She is given three to four and one half grains of Nembutal, according to the advance of labor, size of patient, and irritability, and 1/6 grain morphine and 1/200 grain scopolamine hypodermically. One to three grains of Nembutal may be repeated if necessary to control pain. The expectant mother's heart, foetal heart, presentation, and advancement of labor are examined at this time, and nurses advised accordingly. When the cervix is fully dilated and perineum begins to bulge, she is transferred to the delivery room. Here she is washed again with green soap, painted with tincture of Mercressin or Merthiolate, and covered with sterile drapes. The doctor and nurses scrub as for major operation. A complete set of instruments is set at the doctor's disposal for any emergency that might arise. Ether inhalations are given when head passes over perineum.

Episiotomy and low forceps delivery is a rule rather than the exception in all primiparous cases. When the cervix is fully dilated and the presenting part does not progress after several hard pains, it is the doctor's move to do something about the case. Under no condition do I use

Pituitary extract until after the second or third stage of labor.

The most important complications of labor and delivery in this group of cases are:

I. Malpresentations

A. Transverse Position, Hand presenting With Abruptio Placenta.

One case transferred from a blood soaked bed to the delivery table for version and extraction. The mother died from exsanguination before intravenous fluids could be started.

B. Occiput Posterior—Four cases.

Two cases were delivered by forceps in the posterior position, one delivered spontaneously, and the fourth was delivered by podalic version after six hours trial labor and forceps maneuvers, the latter a foetal death.

C. Twins

Four sets of twins were delivered in this group, but only one case complicated. This patient was seen in labor for the first time, with a blood pressure of 240 systolic and 120 diastolic. A foot was presenting for the first baby, and the second baby was in a transverse position. They were delivered by extraction, version and extraction, respectively.

II. General Contracted Pelvis

One border line case with an obstetrical conjugate of 9 cm. was given a trial labor with an attempted forceps delivery to no avail. Version was done with much difficulty but finally a dead baby extracted. Of course a section was indicated for a nine and one-half pound baby, but as yet we have no set rule or regulation to determine operative delivery in our border line group.

III. Eclampsia

Two convulsive cases were referred to Dyess Hospital from adjacent communities. They were given the modified Stroganoff treatment, i. e., morphine hypodermically, chloral hydrate orally, 10% magnesium sulfate, and 50% glucose intravenously, with forceps delivery under shallow ether anesthetic.

IV. Caesarean Section

One case began bleeding during the first half of the seventh month of pregnancy

and was diagnosed placenta previa lateralis. She was treated conservatively for two months and given two blood transfusions preparatory to operation. A section was performed two days before due date of term. A viable baby was delivered and mother recovered without complication.

V. Late Toxemia with Pelvic Inflammatory Disease

One nineteen year old patient was seen in labor for the first time, December 29, 1937, with a blood pressure of 190/120, 3 plus albumin and a temperature of 103.8 degrees F. A dead fetus was delivered ten hours later. This patient conceived again three months later, but she came to the clinic for prenatal care regularly and delivered a normal baby December 9, 1938.

The logic of all our prenatal care, or closely supervised hospital delivery, is to lower the maternal and infant death rate, and give society a more healthy race of people.

The maternal age of my group ranged from 42 years of age to 15 years of age, with an average age of 25.8 years.

Maternal and Infant Death Rate at Dyess Hospital

O. B. Cases	Maternal Deaths	Percent
160	Abruptio placenta.....	1 .62
O. B. Deliveries	Infant Deaths	Percent
164	Abortions	2 4.26
	Premature labor.....	1
	Late toxemia.....	1
	Occiput post.....	1
	General contracted pelvis ..	1
	Abruptio placenta ..	1
	Total ..	7

CONCLUSION

An obstetrical case that has been treated scientifically from the first date of examination through the time of delivery, according to the most modern methods of prenatal care and surgical technique during labor, in the small hospital, has an even chance, if not greater, to survive, than in the large hospital, because we do not have the danger of epidemic diarrhea or respiratory diseases that often invade the larger nurseries. Our records show an infant mortality rate of 42.6 death per thousand, whereas the Chicago Lying-In Hospital shows 43, and Cook County Hospital 49 deaths per thousand births.

DIAGNOSTIC MAXIMS IN PRIMARY SYPHILIS

- 1. Any genital sore in male or female is possibly primary syphilis until proved to be otherwise.
- 2. Any indolent lesion anywhere on the body (especially lips, tonsils, fingers) which fails to heal in two weeks may be primary syphilis.
- 3. The diagnosis of primary syphilis is a laboratory, not a clinical procedure.
- 4. Do **not** treat suspected primary syphilis locally until repeated dark fields are negative.
- 5. Do **not** give antisypilitic treatment on suspicion; prove the diagnosis.
- 6. There is reason for urgent haste in diagnosis; hours count!

Diagnose Primary Syphilis by—

- 1. Dark-field of surface serum; if negative, repeat at least three times on consecutive days before local treatment.
- 2. If surface dark-field is negative, do dark-field of aspirated serum from lesion's base, **or**
 - 2a. Dark-field of aspirated material from lymph node.
- 3. If you have no dark-field microscope, send the patient at once to someone who has; or send a capillary tube specimen (see text) to nearest laboratory.
- 4. Do serologic test at first visit. If any of these tests are positive, treat at once. If all are negative—
- 5. Do serologic test follow-up for 3 months, weekly for first month, every 2 weeks thereafter.

Lesions of Bones and Joints

Involvement of the bones and joints in early syphilis is far more common than is generally supposed. Symptoms are more important than signs. The usual manifestations are:

- 1. Osteocopic pains, often nocturnal, involving the shafts of all the long bones. Localized tender areas may be present on palpation though no other abnormalities are obvious.
- 2. Arthralgia. Dull aching and stiffness of the joints, large and small, worse at night or in the morning. There are no objective or X-ray changes.
- 3. Hydrarthrosis, usually involving the knees and ankles. No X-ray changes.
- 4. Actual acute periostitis (commonest in the tibia) in which, owing to its acuteness, X-ray changes are at first absent.

There is nothing about the first three of these manifestations to differentiate them from a variety of other conditions, and in fact the mistaken diagnoses of "neuritis," "rheumatism," and "infectious arthritis" (acute, subacute, or chronic) are commonly made.—Supplement No. 5. Venereal Disease Inf., U.S.P.H.S.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

FREQUENTLY the physician is asked whether or not it is safe for a tuberculosis person to marry. The danger of infecting children who may be born of a tuberculous parent is well recognized. What of the possibility of infecting the other marital partner? Because of contradictory expressions of opinion on this point, H. I. Spector sought for an answer by means of the statistical method.

MARITAL TUBERCULOSIS

Marital tuberculosis is defined as the development of clinical tuberculosis in both husband and wife. One must not, however, apply this definition dogmatically, for it cannot, in all cases, be assumed that the disease has been transmitted by the consort, and it is also possible for a tuberculous consort to marry a supposedly non-tuberculous mate who at the time of marriage had an unrecognized latent or active tuberculosis. But undoubtedly infection from the tuberculous marital partner to the healthy one takes place in the majority of instances of marital tuberculosis.

A review of the literature regarding marital tuberculosis reveals that conclusions of various writers contradict each other. The frequency of marital tuberculosis is reported by one writer as 2.9%, by another as 58% and variations between these figures by several others. The more recent literature, however, seems to concur with the view that marital tuberculosis is much more common than in the general population.

The writer received 208 replies from questionnaires sent to physicians in the United States, European and South American Countries. There was a divided opinion as to the frequency of marital tuberculosis; the majority believing that tuberculosis in both husband and wife is not common. Many, however, believed the incidence to be greater than in the general population. The number of physicians who were inclined to permit marriage between arrested tuberculous individuals was greater than those

who permitted marriage of a tuberculous individual with a non-tuberculous one. The majority permitted tuberculous couples to have children, but with reservations.

In addition to these collected opinions the author made a study of marital tuberculosis based on 11,193 cases of tuberculosis reported during a ten-year period to the Health Division of St. Louis. From this group came 210 couples (420 persons) all with clinical, active disease. It was found that while only 3.8% of the reported cases of tuberculosis in married people are in both husband and wife, nevertheless the risk of contracting the disease when in marital contact with an active case is 29 times greater than it is in the general population.

About one-third were negroes—the rest white. Sputum was positive in both consorts in 20% of cases, positive in either wife or husband only in about 25%. In 54.5%, sputum was negative or questionable.

Interested in knowing whether the danger of infection from the marital tuberculous partner is greater to the healthy consort or to the other contacts, especially children, case histories from the viewpoints of infection and the development of clinical disease in contacts were analyzed. It was found that the incidence rate in contacts was 9% or 69 times greater than in the general population.

Marital Tuberculosis, H. I. Spector, M. D., *Amer. Review of Tuber.*, Vol. XL, No. 2, Aug., 1939.

NUMEROUS mechanical devices have been invented to prevent the inhalation of silica. Recently the interest of industrial hygienists has been centered on a means of preventing silicosis by the inhalation of metallic aluminum. The Canadian Medical Association Journal reports the results of experiments carried on jointly by a metallurgical engineer, a surgeon and a medical research worker. Brief notes of the report follow.

PREVENTION OF SILICOSIS BY METALLIC ALUMINUM

Rabbits exposed to quartz dust for six months all showed well developed silicosis. Rabbits exposed to quartz dust plus 1% metallic aluminum powder for the same period did not develop silicosis.

Experimental evidence strongly suggests that the toxicity of silica is due to that portion of the silica which is in the dispersed colloidal form. The addition of small quantities of metallic aluminum powder almost completely inhibits the solubility of silicious material in the beaker. The author's experiments show that the "solubility" of silica is a measure of the quartz particle. They have demonstrated that the absorbed film of hydrated aluminum oxide is sufficiently impermeable to prevent silica from passing into "solution," i.e., the state in which it will form silico-molybdic acid.

All the experimental evidence indicates that the inactivation of quartz by aluminum is not a systemic reaction but takes place only when aluminum is closely associated with quartz in body cells or fluids. Subcutaneous injections and dusting experiments showed that the minimum amount of metallic aluminum necessary to inactivate quartz in tissues is 1% when **uniformly** mixed with quartz.

Among the conclusions reached by the experimenters are these:

Metallic aluminum on being converted into hydrated alumina reduces the toxicity of quartz in tissues in three ways, (a) by flocculation; (b) by absorbing silica from solution; but (c) chiefly by coating the quartz particle with an insoluble and impermeable coating.

This coating has been definitely identified as a gelatinous hydrated alumina, which on drying forms the crystalline alpha aluminum mono-hydrate, Boehmite ($\text{Al}_2\text{O}_3\cdot\text{H}_2\text{O}$).

No animal whose lungs on analysis contained 1% or more of metallic aluminum have shown any evidence of silicosis up to periods of seventeen and a half months in contrast to well de-

veloped silicosis in the quartz control rabbits in seven months.

In lungs having less than 1% aluminum where fibrosis is present there is no demonstrable evidence of hydrated alumina in the fibrotic areas.

In lungs where the hydrated alumina is shown on staining to be intimately and uniformly mixed with the silica particles fibrosis has never been found.

Aluminum dust for the prevention of silicosis should be of a particle size below 5 microns and grease-free.

It should be uniformly mixed in any inhaled dust and bear a definite percentage to this dust at all times.

To prevent silicosis, aluminum dust may be inhaled daily independently of the silicious dust.

The aluminum dust must be sufficiently concentrated in the inhaled dust to provide a minimum concentration in the lung of 1% at all times.

The inhalation of aluminum dust in large quantities over long periods of time showed no effect on the general health of the animals and no evidence of toxicity or damage to tissues.

Aluminum dust in any concentration necessary to prevent silicosis has been shown to be hundreds of times below the explosive concentration of aluminum powder.

The prevention of Silicosis by Metallic Aluminum by J. J. Denny, M.Sc., and others, Canadian Med. Assn. Jour., Vol. 40, No. 3, Mar., 1939.

COMING MEDICAL MEETINGS

Ninth Councilor District Medical Society, Harrison, December 5th.

Arkansas Medical Society, Fort Smith, April 15-17th, 1940.

The officers of the United States Chapter of the International College of Surgeons cordially invite all physicians and surgeons in good standing to their Fourth Assembly, to be held in Venice, Florida, February 11-14, 1940. There is no registration fee. For general information please address Dr. Fred H. Albee, Chairman, 57 West 57th Street, New York City.

THE JOURNAL

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EDITORIAL

THE PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION*

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

Today the medical and health functions of the United States are divided among a multiplicity of departments, bureaus, and federal agencies. Thus, the United States Public Health Service is in the Federal Security Department; the Maternal and Child Welfare Bureaus in the Department of Labor; the Food and Drugs administration in the Department of Agriculture;

the Veteran's Administration and many other medical functions are separate bureaus of the government. The WPA, CCC, and PWA are concerned with a similarity of efforts in the field of preventative medicine. The Federal Works Administration and the Federal Housing Administration also have some medical functions.

Since 1875, the American Medical Association has urged the establishment of a single agency in the federal government under which all such functions could be correlated in the interest of efficiency, the avoidance of duplication, and a saving of vast sums of money. Such a federal health agency, with a secretary in the cabinet, or a commission of five or seven members, including competent physicians would be able to administer the medical and health affairs of the government with far more efficiency than is now done.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

The physicians of the United States have given freely of their time and of their funds for the care of the sick. Their contributions to free medical service amount to at least \$1,000,000 a day. The physicians of this country have urged that every person needing medical care be provided with such care. They have urged also the allotment of funds for campaigns against maternal mortality, against venereal disease, and for the investigation and control of cancer. The medical profession does not oppose appropriations by Congress of funds for medical purposes. It feels, however, that in many instances states have sought aid and appropriations for such functions without any actual need on the part of the state, in order to secure such federal funds as might be available. It has also been impossible, under present technics to meet actual needs which might exist in certain states with low per capita incomes, with needs far beyond those of wealthier states, in which vast sums are spent.

It is proposed here simply that Congress make available such funds as can be made available for health purposes; that these funds be administered by the federal health agency, mentioned in the first plank of this platform, and that the funds be allotted on proof of actual need to the federal health agency, when that need be for the prevention of disease, for the promotion of health, or for the care of the sick.

* Adopted by the Board of Trustees, November 16, 1939.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

Obviously if federal funds are made available to the individual states for the purposes mentioned in the second plank of this platform, there might well be a lessened tendency in many communities to devote the community's funds for the purpose, and, in effect, to demand that the federal government take over the problem of the care of the sick. Hence, it is suggested that communities do their utmost to meet such needs with funds locally available before bringing their need to the federal health agency, and that the federal health agency determine whether or not the community has done its utmost to meet such need before allotting federal funds for the purpose.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

The medical profession is not static. It wishes to extend preventative medical service to all of the people within the funds available for such a purpose. Obviously, this will require not only a federal health agency which may make suggestions and initiate plans, but also a mechanism in each community for the actual expansion of preventative medical service and for the proper expenditure of funds developed both locally and federally. In the development of new legislation such mechanism may be suitably outlined.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

The medical profession does not yield to any other group in this country in its desire to extend medical care to all of those unable to provide themselves with medical service. The American Medical Association through its House of Delegates has already recognized the possible existence of a small group of persons able to provide themselves with the necessities of life commonly recognized as standard in their own communities, but not capable of meeting a medical emergency. It is recognized, however, that only persons of the same community fully familiar with the circumstances can determine the number of people who come properly under such classification and that only persons in actual contact with such instances are capable of administering suitably and efficiently the medical care that may be required. Hence it is

the platform of the American Medical Association that medical care be provided for the indigent and the medically indigent in every community but that local funds to be first utilized and that local agencies determine the nature of the need and control the expenditure of such funds as may be developed either in the community or by the federal government.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

In the so-called National Health Program it is asserted that one-half the counties of the United States are without suitable hospitals, and vast sums are requested for the building of new hospitals. In contrast, reputable agencies within the medical profession assert that there are only 13 counties more than 30 miles removed from a suitable hospital and that in 8 of those 13 counties there are five people per square mile. In the United States today the percentage of hospital beds per 1,000 of population is higher than that of any other country in the world. This fact is completely ignored by those who would indulge in a program for the building of great numbers of new hospitals.

Moreover, it seems to be taken for granted that hospital building has languished in recent years, whereas considerable numbers of hospitals have been built with federal funds by various state agencies and also by the PWA, the WPA and by the Federal Works Administration.

Analyses may indicate that in many instances such hospitals were built without adequate study as to the need which existed or as to the possible efficient functioning once it was erected. Moreover, there is evidence that in recent years many of the hospitals of the United States known as nonprofit voluntary hospitals have had a considerable lack of occupancy due no doubt to the financial situation in considerable part. It seems logical to suggest then that such federal funds as may be available be utilized in providing the needy sick with hospitalization in these well established existing institutions before any attempt is made to indulge in a vast building program with new hospitals. In this point of view the American College of Surgeons, the American Hospital Association, the Catholic Hospital Association, the Protestant Hospital Association and practically every other interested voluntary body agree.

Again it has been argued that the demands for medical care in some sections of the country

might require the importation of considerable numbers of physicians or the transportation of numbers of physicians in the areas in which they now are to other areas. In this connection it would seem to be obvious that a change in the economic status of the communities concerned would result promptly in the presence of physicians who might be seeking locations. The utilization of existing qualified facilities would be far more economical than any attempt to develop new facilities.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

In the United States today our sickness and death rates are lower than those of any great country in the world. This fact was recognized by the President of the United States when he sent the National Health Program to the Congress for careful study. The President emphasized that a low death rate may not mean much to a man who happens to be dying at the time of tuberculosis. The medical profession recognizes the importance of doing everything possible to prevent every unnecessary death. At the same time it has not been established by any available evidence that a change in the system of medical practice which would substitute salaried government doctors for the private practitioner or which would make the private practitioner subject to the control of public officials would in any way lower sickness and death rates.

There exists, of course, the fact that some persons are unable to obtain medical service in the circumstances in which they live and that others, surrounded by good facilities, do not have the funds available to secure such services. Obviously here again, there is the question of economics as the basis of the difficulty and perhaps lack of organization in distribution of medical service and a failure to utilize new methods for the distribution of costs which might improve the situation.

The medical profession has approved prepayment plans to cover the costs of hospitalization and also prepayment plans on a cash indemnity basis for meeting the costs of medical care. It continues, however, to feel that the development of the private practice of medicine which has taken place in this country has led to higher standards of medical practice and of medical service than are elsewhere available

and that the maintenance of the quality of the service is fundamental in any health program.

8. Expansion of public health and medical services consistent with the American system of democracy.

Careful study of the history of the development of medical care in various nations of the world leads to the inevitable conclusion that the introduction of methods such as compulsory sickness insurance, state medicine and similar technics results in a trend toward communism or totalitarianism and away from democracy as the established form of government. The intensification of dependence of the individual on the state for the provision of the necessities of life tends to make the individual more and more the creature of the state rather than to make the state the servant of the citizen. Great leaders of American thought have repeatedly emphasized the fact that liberty is too great a price to pay for security. George Washington said, "He who seeks security through surrender of liberty loses both." Benjamin Franklin said, "They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety."

In these times when the maintenance of the American Democracy seems to be the most important objective for all the people of this country, the people may well consider whether some of the plans and programs that have been offered for changing the nature of medical service are not in effect the first step toward an abandonment of the self-reliance, free will and personal responsibility that must be the basis of a democratic system of government.

HEAD INJURIES

R. B. Robins, M. D.

Conservatism has been the vogue in the management of head injuries for a number of years and nobody will deny the propriety of this attitude toward the management of these cases. The pendulum, however, has swung so far towards conservatism that there has been a tendency to forget that there is quite a percentage of these cases that are entitled to the advantage of operative treatment.

Dr. Donald Munro¹ has called our attention to the fact that, in his large experience, one out of every three cranio-cerebral injuries requires some type of operative treatment. These cases

¹ Munro, Donald: *Cranio-Cerebral Injuries*, Oxford University Press, 1938.

include those with sub- and extra-dural hemorrhages and compound and depressed fractures of the skull. About half of the operative cases are sub-dural hematomas. In other words, in his experience, the occurrence of sub-dural hematoma is about one in every five cranio-cerebral injuries.

The typical extra-dural hemorrhage is fairly easily diagnosed, but the sub-dural hemorrhage cases are often very difficult to diagnose and suspicion only often leads to the final diagnosis. Transtemporal exploratory trephinement is a simple operative procedure and should be used as a diagnostic measure more often than it is. All cases that exhibit unfavorable progress should have the benefit of a bilateral exploratory trephinement.

EDITORIAL COMMENT

TUBERCULOSIS CHRISTMAS SEAL SALES HAVE SAVED 200,000 LIVES

Two hundred thousand persons are alive in the United States today who would have been dead of tuberculosis if last year had been 1904. The Journal of the American Medical Association for Nov. 18 declares.

Since that year, which marked the inception of the National Tuberculosis Association, the mortality rate from this disease has been cut down from 201 deaths per hundred thousand of population to 49 per hundred thousand in 1938. People are now being urged to buy Christmas Seals, which help to finance the work of this association and its 2,500 affiliated organizations in all parts of the country. A part of the money derived from the sale of these seals goes into a fund which maintains a rehabilitation program for tuberculous persons in sanatoriums.

But the real problem in fighting tuberculosis involves education: Those who have tuberculosis in its insipient stages can be cured if they are aware of their disease. In order to find these early cases, the people must be educated to look for it.

In spite of the improvement of diagnostic methods, only 13 per cent of patients admitted to sanatoriums are found to be in the early stages of the disease, thus showing that there are far too many with unrecognized cases in the community infecting their families and neighbors. Only by finding every single case

can the disease be eliminated. Early examination, skillful diagnosis and prompt treatment are the factors that make tuberculosis curable and preventable. Persons with questionable cases should be promptly examined.

J. A. M. A., Nov. 18, 1939.

OBITUARY

EDWIN THOMAS BROWN, age 58 years, died suddenly October 28th of a heart attack while calling on a patient. A graduate of the Tulane University of Louisiana in 1904, he had practiced at Marvell for the past 12 years. Previously he was located at Lexa for 18 years. He was a member of the Phillips County Medical Society and of the Arkansas Medical Society. Surviving relatives are two daughters and a son.

ALEXANDER CRUMP KIRBY, age 47 years, died unexpectedly at his home of a heart attack November 4th. A graduate of the University of Arkansas and of Washington University School of Medicine, he had practiced at Little Rock since 1920. Previously he had served in the Army Medical Corps during the World War and on the staff of the Saint Louis Children's Hospital. He was a member of the faculty of the University of Arkansas School of Medicine and was a staff member of all Little Rock hospitals. In addition to his membership in the Pulaski County Medical Association and the Arkansas Medical Society, he was a Fellow of the American Medical Association and of the American Academy of Pediatricians and a member of the Arkansas State Pediatric Society. Surviving relatives are his mother and two brothers.

FRANK O. ROGERS, age 63, of Little Rock, died in a Memphis hospital November 8th. Born in Concord, North Carolina, he was a graduate of the University of Maryland School of Medicine in 1901, and had practiced in Little Rock for the past 30 years. For several years he had been associated with Dr. B. A. Bennett. Surviving relatives are his wife and two daughters.

PROCEEDINGS OF SOCIETIES

Prairie County Medical Society has elected the following officers: President, Edward Adams, Hazen; Vice-President, J. R. Lynn, Hazen; Secretary-Treasurer, J. C. Gilliam, Des Arc; President-elect, W. J. B. Williams, Des Arc; Delegate, W. M. Parker, DeValls Bluff, and Alternate J. C. Gilliam.

The Third Councilor District Medical Society has elected T. G. Porter, Hazen, President, and M. C. John, Jr., Stuttgart, Secretary.

The Sebastian County Medical Society met in dinner session November 14th for the following program: "Gas Bacillus Infection," M. B. Bowman, and "The Steinach Operation," H. King Wade, both speakers of Hot Springs National Park.

Ralph E. Weddington, Secretary.

The Washington County Medical Society was addressed November 7th by A. A. Blair, "Medical Management of Thyrotoxicosis"; A. F. Hoge, "Surgical Management of Thyrotoxicosis," and W. R. Brooksher, "Irradiation Treatment of Thyrotoxicosis," all speakers of Fort Smith.

James F. Lewis, Secretary.

The Mississippi County Medical Society was addressed November 7th by H. B. Gotten and Chas. G. Andrews, of Memphis, on "Acute Nephritis" and "Salivary Gland Tumors," respectively. The December meeting will be held at Blytheville December 5th, at which time officers will be elected and plans discussed for 1940.

F. D. Smith, Secretary.

The Benton County Medical Society met in dinner session at Siloam Springs November 9th for the following program; "Vaginal Hysterectomy," G. A. Hughes, Siloam Springs, and "Infectious Mononucleosis," Dr. Deutsch, Stilwell, Oklahoma.

Geo. M. Love, Secretary.

The Ouachita County Medical Society met in regular monthly session at the Camden Hospital November 2nd. A delightful banquet was served by the nurses of the hospital. There were seventeen physicians present. The program was as follows: "Some of the Technical Aspects of Skin Grafting," Dr. E. J. Poth, Professor of Surgery, Univ. of Ark. School of Medicine,

and "History and Trends of Medical Education," Dr. Stuart P. Cromer, Dean, Univ. of Ark. School of Medicine.

R. B. Robins, Secretary.

The Pulaski County Medical Society met November 6th for the following program: "Medical Problems in Tuberculosis," J. D. Riley, State Sanatorium, and "Surgical Approach and Treatment of Tuberculosis," Harvey Shipp, Little Rock.

E. H. White, Secretary.

The Pulaski County Medical Society met November 20th for the following program: "The Use of Air in the Treatment of Spastic Paralysis," Pat Murphey.

E. H. White, Secretary.

MEDICINE IN THE NEWS

The seventh season of broadcasting by the American Medical Association over the facilities of the National Broadcasting Company and affiliated stations opened Thursday, November 2, at 4:30 p. m. eastern standard time (3:30 central standard time, 2:30 mountain time and 1:30 Pacific time). The title of the program is "Medicine in the News."

True to their title, the programs will consist of dramatizations based on what is happening in the world of medicine. Each program will include a principal news item from The Journal or some other reputable medical source or from Hygeia. This will be followed by one or more highlights on current medical news. Each program will close with a question of the week drawn from the question and answer correspondence of Hygeia. A question will be asked each week and answered the following week.

Since the program will be based on events as they proceed, it will be impossible to announce program topics in advance. Each program will be developed within the week immediately preceding its appearance and in part, perhaps, the programs will often be developed within forty-eight hours of their broadcasting.

As heretofore, this is a sustaining program made possible through the co-operation of the National Broadcasting Company. A sustaining program brings no revenue to any radio station or to the network. Therefore radio stations, except those owned and operated by the National Broadcasting Company, are not obligated to broadcast the program. State and county medical societies should express interest in the program by letter or personal interview with the manager of the local radio station. Such evidence of local interest may be the deciding factor in broadcasting the program locally.

Following is a list of the radio stations affiliated with the Blue Network of the National Broadcasting Company. This is a list of stations to which the program is available, not a list of stations which are certain to broadcast the program. A list of stations announcing intention to broadcast the program will be published in a later issue of The Journal.—Journal of the American Medical Association.

PERSONALS AND NEWS ITEMS

Loyce Hathcock, Fayetteville, attended the recent Medico-Military Training Period at the Mayo Clinic.

The Tri-State Medical Society was addressed at its meeting in Marshall, Texas, November 9th, by Geo. B. Fletcher, Hot Springs National Park, on "Under Water or Pool Treatment of Certain Abnormal Conditions of Muscles, Nerves and Joints." Discussion participants in the session were L. J. Kosminsky and Wm. Hibbits, Texarkana.

A. H. Tribble, Hot Springs National Park, visited the Mayo Clinic during October.

Dr. and Mrs. I. F. Jones, Fort Smith, spent an October vacation in New Orleans.

Jos. F. Shuffield, Little Rock, has been elected president of the Arkansas State Fox Hunters' Association.

W. W. Brown has been appointed health officer at Hardy.

W. J. Curry, Rogers, has been elected vice-president of the Frisco System Medical Association.

M. B. Bowman, Hot Springs National Park, took special work at the Mayo Clinic during October.

Chas. S. Holt, Fort Smith, spent a November vacation in Florida.

Clyde McNeil has been elected a director of the Rogers Kiwanis Club.

John Redman, formerly of Clarendon, has accepted appointment in the Army Medical Corps.

J. R. Roberts addressed the Little Rock Exchange Club recently on "The Control of Syphilis."

Mitchell Blaine is erecting a hospital at Mammoth Springs.

Frank Vinsonhaler, Little Rock, returned from an European visit in October.

Frank A. Gray, Batesville, recently took special work in radium and X-ray therapy at Johns Hopkins Medical School.

Wesley J. Ketz, formerly of Baltimore, has joined Frank A. Gray at Batesville as surgeon for the Gray Infirmary.

C. Lewis Hyatt is now associated with David T. Hyatt in Little Rock.

D. W. Golstein, Fort Smith, attended the meeting of the American Academy of Dermatology and Syphilology in Philadelphia during November.

Glenn Johnson and E. H. White, Little Rock, have been elected members of the Central States Association of Obstetricians and Gynecologists.

W. W. Brown, Hardy, has been appointed health officer for Sharp County.

Raymond T. Smith and Ralph E. Crigler, Fort Smith, have been elected president and second vice-president, respectively, of the Fort Smith Kiwanis Club.

W. F. Adams, Fort Smith, and Alfred Hathcock, Fayetteville, attended the recent meeting of the Oklahoma City Southwest Clinical Society.

D. E. White has been elected a director of the El Dorado Baseball Association.

J. B. Wharton, Jr., El Dorado, attended the recent session of the American College of Surgeons in Philadelphia.

MARRIED—At Kansas City, November 28th, H. H. Smith, Fort Smith, and Mrs. Edward Williams, Kansas City.

C. M. Harwell, Osceola, took postgraduate work at Tulane University during November.

Dr. and Mrs. Raymond T. Smith, Fort Smith, spent a recent vacation in Chicago.

A. S. Buchanan, Prescott, recently addressed the student body of Harding College at Searcy.

F. Walter Carruthers, Little Rock, addressed the Central Texas Medical Association at Corsicana, November 14th.

Allan A. Gilbert, Fayetteville, recently addressed a Red Cross conference at Eureka Springs.

Glenn Johnson, J. B. Reaves and E. H. White, Little Rock, attended the recent session of the Central States Association of Obstetricians and Gynecologists in Kansas City.

The following attended the recent session of the American College of Surgeons in Philadelphia: H. Fay H. Jones and Joe H. Shuffield, Little Rock, H. A. Stroud, Jonesboro, A. D. Cathey and D. E. White, El Dorado. Also in attendance and admitted to fellowship were Paul G. Autry, Little Rock, and Berry Moore, El Dorado.

A. F. Hoge recently addressed the Saint Scholastica's Academy student body at Fort Smith on "Progress in Medicine."

Married—On November 5th, C. Lewis Hyatt, Little Rock, and Miss Wanda White, Van Buren.

W. W. Brown has been appointed local surgeon for the Frisco Lines at Hardy.

Participants from the Society in the Southern Medical Association meeting at Memphis during November were: F. Walter Carruthers, Little Rock, "Synovectomies of the Knee Joint," and W. R. Brooksher, Fort Smith, "Carcinoma of the Jejunum." Appearing on the program as discussants were: C. H. Lutterloh, Hot Springs National Park; Geo. B. Fletcher, Hot Springs National Park; M. C. Hawkins, Jr., Searcy; G. W. Reagan, Little Rock; Hoyt R. Allen, Little Rock, and Paul L. Mahoney, Little Rock. Scientific exhibits were presented as follows: W. C. Langston, Paul L. Day, Wm. J. Darby and C. F. Shukers, Little Rock, "Vitamin M. Deficiency in Monkeys"; Fred Hames, Pine Bluff, "Moulages of Malignant and Other Lesions"; Ellery C. Gay, Little Rock, "Plastic Surgery", and K. W. Cosgrove, Little Rock, "Photography of the Eye." Jerome S. Levy, Little Rock, was vice-chairman of the section on Gastroenterology and W. B. Grayson, Little Rock, was first vice-president of the American Public Health Association, Southern Branch. Dr. Grayson also discussed the paper of C. B. Crittenden, Louisville, before this section.

J. P. Clemens has moved from Mount Holly to Stephens.

Ralph Crigler, Fort Smith, addressed the Charleston High School student body November 15th on "Venereal Diseases."

"Some Common errors in Diagnosis and Treatment of Chest Problems," by J. K. Donaldson, Little Rock, appeared in the August issue of The American Journal of Surgery.

RANDOM THOUGHTS OF THE SECRETARY

October 23rd. The wonder boy, the prosecutor of the Department of Justice, the ex-town-mayor, loses another decision in his trust-breaking crusades. This time the Supreme Court remains steadfast to its rule and refuses to "jump" the Court of Appeals, even though Thurman thought the Court would for him. This is becoming an Alger story in reverse: Thurman Arnold, or From Indictment to Inquietude.

October 24th. At luncheon with the Southeastern Oklahoma Society in Poteau where we discuss religion with Chamberlain and the Presbyterian minister, convincing us of what we have long suspected, that Chamberlain will talk with seeming authority on any subject, as will we. Shippey being our witness that we were invited out to lunch, we scorn the jibes of Wolferman and Chamberlain that we came only for the free lunch.

October 29th. This being an ideal day to get outdoors, we hie forth to White Rock, unqualifiedly the greatest scenic view in the state of Arkansas. To the east the flats adjacent to Clarksville, the white houses of Ozark, the winding Arkansas and Mulberry; to the south and west, a series of towering ridges with thick-set trees just beginning to don their autumnal robes of gold, brown and scarlet. The intervening valleys seem more in repose than in any hill section we have viewed. Truly a scenic delight, a region of nature at its magnificence, undisturbed by the approach of man-made distractions—may it remain so!

November 3rd. Peggy thinks, not without reason, that no one but a nut would journey forth to Muskogee, sit in an Oklahoma blizzard, freezing gradually, whilst the high school wins another game 21-0, as we did this night. Yet the entire family showed enthusiasm, climaxed by the youngster's hero worship, as Jaber ambles 75 yards for a touchdown on a recovered fumble.

November 4th. We join the homecoming crowd, certainly not the festive scene of yore after five o'clock. Yet we have had the opportunity of observing the greatest display of spirit and alertness we have seen on a football field in many a day, regrettably displayed by the Texans. One grandstand quarterback expressed it well when he said "it was a wonderful shame" To our way of thinking this A. & M. crowd has a good hold on the handle of one of the Bowl games now. Would we like to see that contest? Extra-stadium glimpses are of "Mr. Smith Goes to (the) Washington (Hotel)" for an A. & M. pep session, which calls for ribbing on our part but our meeting after the game leaves us with but feeble comments to Euclid and Madge's retorts. Missing in the thousands

that earnest footballer, Duel Brown. Home in contemplative silence, but once again eager and enthusiastic as Elizabeth and Sid charcoal broil steaks from one of the best cows ever to trod green pastures, and to bed, happy over the whole thing.

November 6th. Meeting again with the Washington County Medical Society, the attendance augmented by a group from Rogers who refrain from heckling. Speaking our part in a symposium on toxic goiter with Blair and Hoge, being asked but one leading question, and that by the President, Alfred Hathcock. Strangely enough, mention of the Farm Security Administration is brought up only by McNeil, our first medical meeting in many a day in which this issue was not fully discussed.

November 14th. The coming to town of Bowman and Wade affords opportunity for much fun. Bowman slights roentgen therapy in gas infection which impels us to take up the cause, causing all our fair weather friends here at home to support Bowman indirectly as they pursue their favorite hobby, taking us for a ride. If and when we make enough to retire from practice, we just wonder who will be the target of all this which has been ours for years and years. At that, we will probably still come to meetings and, from force of habit, stick our neck out. To Wade, credit for exposition of the methods employed by the foremost charlatan, and for suggestions as to what all of us may do about it. This is a talk we would like all Arkansas physicians to hear.

November 15th. Lunching with the Holt-Krock Clinic this noon, the entire staff repentant over giving us but one sandwich at the last meeting and so furnishing us with turkey dinner. The hour whiled away pleasantly with many an anecdote and naught of shop talk.

November 16th. About Marshall Field's where the youngster and I ride many an escalator while Peggy looks over the entire place. That we were able to locate a package of gum for the hard-riding escalator cowboy youngster of ours in this establishment is ample proof to us that department stores no longer hold terror for us.

November 17th. This day with the secretaries and editors where Indiana's editor, Shanklin, makes us feel good by his comments on these notes, saying among other things, that he feels that he knows many an Arkansas physician from what he has read of him here. Wonder just what his reactions would be on actually meeting Bob Robins and Fay Jones? In the evening to the editor's dinner, this function having grown to include 93 editors and it would seem that many a secretary and other camp-follower becomes an editor for this function.

November 18th. The conference closes not omitting to bring into discussion the Farm Security Administration without which there can be no real medico-economic session these days. It would seem that Arkansas is not alone in views anent this situation. Despite the steady rain and gloom which can be characteristically Chicago's own, we are just a bit envious of Cohenour who fares forth to the Notre Dame-Northwestern affray, unwisely denying himself of our advice to bet on the South Benders as he is now well aware. So to the toyland where Santa Claus, clowns and all the accessories of children's delight are in abundance and away on the Green Diamond at five, which we readily agree is the most modern train in America today.

November 20th. To the daily tasks today, greeted by a letter from Son Corn who mentions bagging the limit on ducks in thirty minutes one morning. Working

in a hectic manner to clear the desk, get away to the Southern for one day, but mostly thinking ahead to the day when we can run down to Lonoke and see if there are really any ducks which we can knock down.

Medical service for the Civilian Conservation Corps has, in the past, been furnished by the medical section of the Officers' Reserve Corps with the exception of a few doctors who were employed on a contract basis. A recent decision of the Director of the CCC and the War Department permits the employment of doctors who are not Medical Reserve officers in this service.

Doctors needed for this service may be now employed under the rating of civilian employees. Under date of October 10, 1939, the initial salary was changed from \$2,600 per annum to \$3,200 per annum. No quarters for families are provided, and the doctor will be required to pay for his food at camps. Temporary quarters for the doctor will be provided at the camps for a nominal fee. Doctors selected for this service will be required to pay their own travel expenses to the nearest district headquarters, where they will be put on temporary duty for instructional purposes before being sent to camps. Travel expenses incurred in the transfer of doctors from the district headquarters to camps or in the transfer from one camp to another will be paid by the Government. If the services rendered are satisfactory, the employment is more or less permanent.

The principal duties at camps consist of the medical care of the enrollees and the practice of preventive medicine. To be eligible for this service, the doctor must be legally qualified to practice medicine and physically able to perform the duties involved.

All doctors interested in this type of service are requested to submit their applications to the office of the Surgeon, Headquarters Seventh Corps Area, Federal Building, Omaha, Nebraska, giving date when available and preference of assignment in the following states: Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Missouri, Kansas and Arkansas.

CHRISTMAS SEALS



*Help to Protect Your
Home from Tuberculosis*

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

From Western Grove comes the report of the death of Mrs. J. C. Blackwood, 70, wife of Dr. J. C. Blackwood of Western Grove, who died at the family home September 25th from injuries suffered in a fall. She is survived by her husband, six children, and several grandchildren. Burial was in Western Grove Cemetery.

The Washington County Auxiliary held two meetings during October. At the program meeting, Dr. Gordon was the speaker. The Auxiliary will send a fair-sized subscription list to Hygeia.

The Independence County Medical Auxiliary did not have a regular meeting in October. On October 19th the Second Councillor District Medical Society met in Searcy. During the meeting of the medical society, Mrs. M. C. Hawkins, Jr., and Mrs. S. J. Allbright of Searcy entertained the ladies with a dinner at the home of Mrs. Hawkins, after which a visit was made to the home of Mrs. Roberts where an extensive line of antiques and hooked rugs were on exhibit.

The Sevier County Medical Auxiliary met at the home of Miss Eleanor Park with Mrs. O. B. Tate as co-hostess. Mrs. Ola Meariman gave a very interesting report on her duties as health nurse. Mrs. Leonard Hampson reported on the laws of the Arkansas Medical State Board. Refreshments were served to Mrs. C. A. Archer, Mrs. G. L. Kimball, Mrs. C. E. Kitchens, Mrs. C. C. Thompson, Mrs. J. S. Hendricks, Mrs. Hampson (Lockesburg), Mrs. R. C. Dickinson (Horatio), Mrs. Meariman, and the hostesses.

The Women's Auxiliary to the Pulaski County Medical Society, Mrs. L. F. Barrier, President, opened the fall season with a meeting at the home of Mrs. S. C. Fulmer. Hostesses were Mrs. Ellery Gay, Mrs. A. F. Pirnique, Mrs. G. W. Reagan, Mrs. Hoyt Choate and Mrs. E. I. Thompson.

Meetings are to be held once each month at the homes of Auxiliary members. The main project of the group is the Arkansas Children's Home and Hospital.

Officers are: Mrs. L. F. Barrier, President; Mrs. S. C. Fulmer, President-elect; Mrs. W. N. Freemyer, first vice-president; Mrs. Harvey Shipp, second vice-president; Mrs. T. D. Brown, secretary; Mrs. C. A. Rosenbaum, treasurer; Mrs. H. A. Higgins, publicity secretary; Mrs. Paul Autry, historian, and Mrs. C. W. Garrison, parliamentarian. Committees include the following—Program: Mrs. Fulmer, chairman; Mrs. Pirnique and Mrs. Gay, Membership; Mrs. C. C. Reed, Jr., chairman; Mrs. Clyde Rodgers and Mrs. Donald Hayes. Entertainment: Mrs. D. A. Rhinehart, chairman; Mrs. R. E. McLochlin, Mrs. R. T. Smith, Mrs. Sloan Sanford, Mrs. Paul Fulmer, Mrs.

W. R. Richardson and Mrs. Ewell Thompson. Visiting: Mrs. J. B. Crawford, chairman, and Mrs. Ellery C. Gay. Medical Students' Wives: Mrs. Paul Fulmer, chairman; Mrs. Vernon Newman and Mrs. E. H. White. Student Loan Fund: Mrs. K. W. Cosgrove, chairman; Mrs. C. E. Oates, Mrs. Val Parmley, Mrs. J. C. Cunningham, Mrs. Harvey Shipp and Mrs. C. R. Chestnutt. Public Relations: Mrs. W. A. Lamb, chairman; Mrs. W. C. Langston, Mrs. G. W. Reagan and Mrs. Joe Shuffield. Education and Public Health: Mrs. R. C. Kory, chairman; Mrs. D. R. Hardeman, Mrs. Alan Cazort and Mrs. J. K. Donaldson. Constitution: Mrs. L. D. Reagan, chairman; Mrs. Pat Murphey. Finance: Mrs. W. A. Snodgrass, chairman; Mrs. E. O. Day and Mrs. J. A. Summers. Memorial: Mrs. C. C. Reed, Sr., chairman; Mrs. Shipp and Mrs. A. W. Strauss. Telephone: Mrs. Newman, chairman; Mrs. Estes Allen, Mrs. R. A. Law, Mrs. Day, Mrs. John Parsons, Mrs. Joe Shuffield, Mrs. G. A. McCormack, Mrs. D. Hayes and Mrs. J. R. May. Hygeia: Mrs. Harry Hayes, chairman, and Mrs. Choate. Arkansas Children's Home and Hospital: Mrs. H. A. Higgins, chairman; Mrs. W. L. Sadler, Mrs. Oscar Gray, Mrs. J. R. May, Mrs. H. G. Hummell, Mrs. D. M. Switzer, Mrs. C. E. Oates, Mrs. J. P. Runyan, Mrs. M. E. McCaskill, Mrs. Reed, Sr., and Mrs. Murphey. Delegates to City Federation: Mrs. C. E. Witt, chairman, and Mrs. B. A. Bennett. Student Friend: Mrs. Bryce Cummins and Mrs. Glenn Johnson.

The unique geographical position of Texarkana often gives us the pleasure of entertaining several state presidents of organizations, particularly those of Texas and Arkansas, at the same time. This pleasure came to the Women's Auxiliary of Bowie and Miller Counties Medical Societies recently when Mrs. H. S. Watson of Waxahatchie, Texas, and Mrs. C. E. Kitchens of DeQueen, Arkansas, who head their state auxiliaries, were guests of the group. An additional honor came with the privilege of entertaining the Southern Auxiliary president, Mrs. W. K. West, of Oklahoma City. It is the first time the local Auxiliary had the pleasure of entertaining the Southern president, that is, a visiting president. Our own Mrs. S. A. Collom has held that office with great distinction.

The home Auxiliary of which Mrs. Ralph C. Cross is president entertained the visitors at a beautiful luncheon at Hotel Grim. The decorations cleverly combined the red and white of Arkansas, and the yellow and white of Texas. At the head of the speakers' T-shaped table were grouped red and white crystal vases holding red roses. A broad red satin ribbon, studded with red and white daisy chrysanthemums was arranged the length of the board. A yellow satin ribbon on which were yellow and white daisy chrysanthemums formed the decorations for the other table. Tomato juice and orange juice, placed alternately, also carried out the motif, and made a gay decorative touch upon entering the dining

room. The menu also was in keeping with the "two states" idea.

Mrs. Cross, presiding over the luncheon, Mrs. L. H. Lanier voiced the invocation, and Mrs. J. T. Robison proposed a beautiful "four-cornered" toast, to the four presidents who were present. A few outstanding committee reports were given showing the work that is being done.

The three visitors each gave an excellent talk bearing on her work after which Mrs. Alex Greene, accompanied by Mrs. Allen Collom, sang "Sylvia" and "When You Come to the End of the Day."

Mrs. Watson, Mrs. Kitchens, Mrs. West and Mrs. Cross wore beautiful corsages of gardenias, the gift of Mrs. S. A. Collom, who has been prominently identified with Auxiliary work prior to this year when she is taking an enforced rest due to illness.

The Woman's Auxiliary to the Union County Medical Society met September 28th at the home of Mrs. L. G. Fincher for business meeting. After the usual routine, meeting adjourned until a later call in October.

Mrs. Paul H. Muse,
Junction City.

An Auxiliary to the Jefferson County Medical Society was organized at a joint meeting of the Medical Society with the Davis Hospital Staff at the hospital October 3, 1939.

All physicians of the county and their wives met at the hospital at 6:30 for a dinner meeting. After dinner, the ladies retired to another room and formed the organization. Mrs. C. H. Dixon, of Gould, was present as organizer and gave a brief talk.

Mrs. Virgil Payne was named president, Mrs. John Walker was elected vice-president, and Mrs. Ross Maynard was selected as Secretary-Treasurer. Mrs. W. T. Lowe was named program chairman.

Mrs. Ross Maynard,
Secretary.

The Auxiliary to the Sebastian County Medical Society resumed its program of regular meetings with a luncheon session Monday at 12:30 o'clock at the home of Mrs. Ruth Moss Carroll.

In the absence of the president, Mrs. I. Fulton Jones, the vice-president, Mrs. A. A. Blair, presided.

Officers and standing committees who are to serve with Mrs. Jones for the 1939-1940 season were announced as follows: Mrs. A. A. Blair, president last year, automatically becomes vice-president; Mrs. W. F. Adams, secretary; Mrs. B. Wayne Freer, treasurer; public relations, Mrs. Walter Eberle, chairman; Mrs. B. B. Bruce, Alma; Mrs. Eugene Stevenson; Hygeia committee, Mrs. S. J. Wolfermann, chairman; Mrs. D. W. Goldstein, Mrs. S. P. McConnell, Booneville; Telephone, Mrs. Charles T. Chamberlain, chairman; Mrs. C. S. Means, Mrs. Fred Krock; Program, Mrs. J. S. Southard, chairman; Mrs. E. C. Moulton, Mrs. Charles S. Holt; Health, Mrs. T. P. Foltz, chairman; Mrs. A. F. Hoge, Mrs. Raymond Smith;

Courtesy, Mrs. M. E. Foster, chairman; Mrs. S. P. Stubbs, Mrs. Ralph Weddington; Publicity, Mrs. W. F. Rose.

Mrs. S. J. Wolfermann, who attended the fall board meeting of the state Auxiliary, held in Little Rock in September, presented the highlights of the meeting. Because the luncheon was the first fall meeting no formal program was arranged. A social hour followed the serving of luncheon. Mrs. J. L. Kellum was a guest of the Auxiliary. Members present were Mrs. A. A. Blair, Mrs. J. S. Southard, Mrs. D. W. Goldstein, Mrs. S. J. Wolfermann, Mrs. Raymond Smith, Mrs. B. Wayne Freer, Mrs. S. P. Stubbs and Mrs. W. F. Rose.

Mrs. W. F. Rose,
Chairman for the Auxiliary of the
Sebastian County Medical Society.

The Arkansas County Woman's Medical Auxiliary was hostess November 7 to the Monroe County Auxiliary at a luncheon rendered at the Riceland Hotel in honor of Mrs. C. E. Kitchens of DeQueen, state president, and Mrs. Pierre Redman, of Mena, state secretary.

The table was covered with a damask cloth centered with a bowl filled with pink chrysanthemums and ferns.

Mrs. S. A. Drennen, president of the Arkansas County Auxiliary presided at the meeting introducing Mrs. Kitchens, who gave a very interesting talk on "Health."

Mrs. Ed McKnight, president of Monroe County Auxiliary gave a review of the work accomplished in that county for the past year.

The meeting was enjoyed by all present and plans were suggested for future meetings.

The Sebastian County Medical Society Auxiliary voted to contribute \$10 to the state student loan fund and to renew Hygeia subscriptions to local clubs and institutions and rural schools at the business session held November 13.

The subscriptions to Hygeia, the official publication of the Medical Association, go to the Girls' Club, Rosalie Tilles Children's Association, Carnegie Library and several rural schools in the Fort Smith area. Mrs. S. J. Wolfermann, Hygeia chairman, reported on the Hygeia Committee work.

Dr. Thomas P. Foltz, president of the Sebastian County Medical Society, was the program speaker. He discussed briefly the subject, "Socialized Medicine," then explained ways in which the Auxiliary may be of benefit to the society by co-operating in the care of indigent patients, particularly negroes. Mrs. I. Fulton Jones, president, presided.

Mrs. Jones and Mrs. J. S. Southard were hostesses. Others present were Mrs. Merle Woods, Huntington, who was admitted to membership; Mrs. G. G. Woods, Huntington; Mrs. B. L. Ware and Mrs. C. W. Hall, of Greenwood; Mrs. Paul McConnell, Booneville, and Mrs. Fred Krock, Mrs. Charles T. Chamberlain, Mrs. W. R. Brooksher, Jr., Mrs. H. C. Dorsey, Mrs. Wolfermann, Mrs. Ralph Weddington, Mrs. Thomas P. Foltz and Mrs. W. F. Rose.

Mrs. W. F. Rose,
Publicity chairman for the Auxiliary
of the Sebastian County Medical
Society.

BOOK REVIEWS

Textbook of Nervous Diseases: By Robert Bing, M. D., Professor of Neurology, University of Basel, Switzerland. Translated and enlarged by Webb Haymaker, Assistant Clinical Professor of Neurology and Lecturer in Neuro-Anatomy, University of California. From the fifth German edition. 838 pages. 207 illustrations, including nine in color. Price, \$10.00. Saint Louis: C. V. Mosby Company, 1939.

In this latest edition of Dr. Bing's neurology, one cannot help but again be impressed by the mathematical exactness of our neurologists in their consideration of our organic nervous system. This edition is well written and the illustrations given are good although, it is perhaps unfortunate that there are not more of them. In discussing the therapy of the various disorders, Dr. Bing gives the accepted treatments, following with his evaluation of these various treatments, not leaving it up to the reader to have to make his own selection. Perhaps the only criticism that the reviewer could offer concerning this volume is the somewhat scant attention given to the so-called functional nervous diseases. Our author introduces the fifty-four pages devoted to the consideration of functional diseases by this statement: "There can be no doubt as to the importance of acquiring an intimate knowledge of the maladies which this term, the psychoneuroses, embraces, for, of all disturbances in the realm of medicine, these are the most common." With this attitude of mind toward the psychoneuroses, it is to be regretted that more space was not given to their consideration. From a strictly neurological basis this volume will make a most excellent addition to one's library.

Diseases of the Skin: By Richard L. Sutton, M. D., Sc. D., LL. D., F. R. S. (Edin.), Professor of Dermatology, University of Kansas School of Medicine, and Richard L. Sutton, Jr., A. M., M. D., L. R. C. P. (Edin.), Associate in Dermatology, University of Kansas School of Medicine. Tenth edition. Pp. 1549. 1,452 illustrations, 21 color plates. Price, \$15.00. Saint Louis: C. V. Mosby Company, 1939.

The tenth edition of this book covers the field of dermatology for both the specialist and the general practitioner. The diagnosis and treatment of the more common skin diseases, as well as for the rare diseases, is given. The great number of illustrations materially aid diagnosis. The authors have not hesitated to give their opinions, interpretations and ideas. The discussion of mechanical and physical agents in therapy is most complete. This is a valuable work for reference as well as for daily consultation.

Population Race and Eugenics: By Morris Siegel, M. D. Pp. 206. Price, \$3.00. Privately printed.

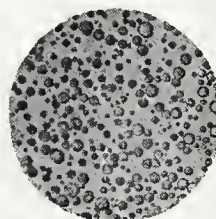
The author discusses the apparent trend toward inadequate reproduction among the upper groups of society which will tend, if uncurbed, to lower the average intelligence to a considerable degree. The various phases of restrictive eugenics are presented fully. The great value of adequate prenatal care is stressed. The author has a detailed grasp of the subject and has clearly written his viewpoint.

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One of these steps is to subject the modified milk to the process of homogenization. In this process the milk is forced by a high pressure pump through very fine passages in which friction and shearing action break up the fat globules as shown by the following photomicrographs.

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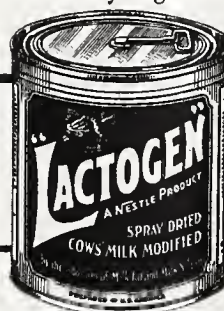
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After Homogenization

Any difficulties in digestion caused by the physical characteristics of the fat of cow's milk are thus obviated by this process.

Because of this reduction in the size of the fat globules which renders the fat of cow's milk more readily digestible, Lactogen contains the full amount of fat that a proper formula for infants should have. Further, this is entirely milk fat, not vegetable or any other substitute fat. The infant's need for milk fat is, therefore, fully met with this one easily digestible food.



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No. 8

ANALGESIA AND ANESTHESIA IN OBSTETRICS*

CLYDE D. RODGERS, M. D.
Little Rock

Obstetric analgesia and anesthesia has been a controversial subject since the first anesthetic was used during delivery. In the past two decades great strides have been made in relieving pain during labor and delivery and, as a result, all of us who do obstetrics are endeavoring to perfect a safe method of producing a near painless labor.

It is the consensus of opinion that analgesics and anesthetics properly given during labor and delivery should be used so long as there is no danger to either the mother or her baby and that in relieving pain during labor the patient is protected from both psychic and physical strains resulting in a more normal puerperal period.

Today practically all physicians who care for maternity patients use some agent or agents to lessen the agonizing pains of a hard labor. The agents used and the methods of using them are numerous. This fact alone proves that there is no method of producing an analgesia during labor which is perfect or nearly so. By that I mean one which will relieve most of the pain during labor and delivery and still be safe for all mothers and babies.

Sir James Y. Simpson in 1874 used ether and soon afterwards introduced chloroform to be inhaled late in labor. He met with great opposition to this method of caring for the patient in labor because the clergy taught that: "In sorrow shalt thou bring forth." During the confinement of Queen Victoria, Simpson used chloroform inhalations late in labor to relieve pain for which he was made a Knight. This incident popularized his method of obstetric anesthesia.

Even now there are times when ether or chloroform are the only agents which can be given during labor but the only time when there is an excuse not to give anything to relieve pain is in a precipitate labor or in the multipara who experiences practically no pain during delivery.

Steinbueckel of Germany in 1902 brought forth the idea of producing an amnesia with scopolamin hydrobromid during labor. Gauss, working in association with Kroenig, soon announced the use of morphine and scopolamin hydrobromid in a series of labors and deliveries. In his series of patients some 75% remembered nothing of their labor. He offered the term, "Twilight Sleep," to the method used in producing this amnesia. This term has erroneously been given any means of relieving pain during labor even to the present.

The German work was soon publicized by American newspapers and magazines, resulting in a demand both from the press and the laity for "Twilight Sleep." The method of using the drugs to produce painless labor was forced on the American profession before its ill effects could be ascertained. It was soon found that the fetal mortality was increasing due to an increased asphyxia of the newborn. Then came a saner use of drugs during labor and for a period of time practically all medication during labor for relief of pain was abandoned.

In 1915 and 1916 Webster, Lynch, Davis, and others used nitrous oxide and oxygen for the relief of pain during both the first and second stages of labor. The original method is still being used to some extent. It consists simply in allowing the patient to inhale deeply three times of 20% oxygen, 80% nitrous oxide mixture as soon as she feels a pain beginning. The third breath is held as long as possible. If necessary a fourth breath can be taken. This produces a transitory analgesia which usually is quite satisfactory to the patient. Automatic controlled gas machines have been made for this purpose. The chief objection to this method is the time consumed in the administration of

* Read before the Sixty-fourth Annual Session, Arkansas Medical Society, Hot Springs National Park, May 10, 1939.

the gas and the expense of the gas. We are warned by DeLee that it sometimes causes a capillary oozing and even postpartum hemorrhage and the prolonged action on the fetus bears some resemblance to carbon monoxide poisoning.

Gwathmey, in the New York Lying In Hospital, developed a technique of producing analgesia. This consisted of morphine and magnesium sulphate being given intramuscularly, followed later in labor by a rectal mixture of quinine, alcohol, ether and olive oil. The ingredients of this mixture are in the following proportions:

Quinine alkaloid	Gr. 20
Alcohol	Minims 45
Ether	Ozs. 2 1-2
Olive Oil q.s.	Ozs. 4

As soon as labor is well established the patient is given $\frac{1}{4}$ grain of morphine in 2 cc. of 50% magnesium sulphate solution and the patient placed in a darkened and quiet room. Thirty minutes later the magnesium sulphate is repeated to augment and prolong the action of the morphine.

Some patients will require nothing more than a terminal anesthesia, but, as a rule, the effects of this medication begins to wear off in $1\frac{1}{2}$ or 2 hours after administration. When the patient first begins to get restless she is given her rectal medication. Inhalation anesthesia is usually required for delivery.

Since 1930 the barbituric acid derivatives have played an important role in the relief of pain during labor. Their use has been and is still being attended with great success. These products are numerous and at present the most commonly used is pentobarbital sodium, formerly called nembutal. Sodium amytal is still being used to some extent. Following is a popular technique of using pentobarbital sodium during labor as outlined by Titus:

1. When the labor is definitely established with regularly recurring pains, some complaint by the patient and beginning dilatation, give $4\frac{1}{2}$ grains of pentobarbital sodium by mouth and $1/150$ grain of scopolamin hydrobromid by hypodermic injection.

2. The patient must be kept quiet in a darkened room and must be closely watched and guarded as excitement occurs in a small percentage of cases and any patient under the effects of these drugs might fall out of bed.

3. A second dose of nembutal, 3 grains, may be required after two to three hours or more

unless the patient has advanced into the second half of the first stage.

4. When the cervix is one-half to three-fourths dilated the Gwathmey ether, alcohol, olive oil mixture may be used.

There are many modifications of this technique most of which carry the patient through labor on nembutal alone or with the addition of an initial dose of scopolamin hydrobromid. The three disadvantages of this method are:

1. The occasional patient is allergic to nembutal and some deaths due to pulmonary edema have been reported.
2. The patient must be watched closely while she is under the influence of the drug.
3. Some babies are asphyxiated after birth.

Avertin, evipal, paraldehyde, and other drugs are used as analgesic agents by some but their use is limited. Like the barbituric acid derivatives, opiates in conjunction with scopolamin hydrobromid are used extensively with an equal degree of success. I use almost exclusively dilaudid and scopolamin in producing an analgesia during labor. The disadvantages are:

1. The patient has to be under the constant supervision of one who knows the action of the drugs and one who is quite familiar with the progressing labor and the behavior of patients under the influence of these drugs.

2. The occasional patient is allergic to scopolamin hydrobromid.

3. Asphyxia of the newborn is common if the timing and dosage of the drugs are not correct.

The technique of acquiring an analgesia with these drugs follows:

1. In the primipara as soon as the pains have become severe enough that the patient wants something for relief and there is beginning dilatation of the cervix she is given dilaudid grains $1/16$ and scopolamin hydrobromid 1 cc. ampule or one $1/130$ grains by hypodermic injection.
2. The room is darkened; everyone is excluded except the nurse or physician who will be in constant attendance.
3. The patient usually relaxes and sleeps from one to two and a half hours. When she begins to get restless scopolamin grains $1/260$ is given and this is repeated if necessary but not within two hours of delivery.
4. As soon as the baby's head begins to distend the vagina or the patient begins to strain with each pain and she is given nitrous

oxide and oxygen during the pains if necessary.

5. As a terminal anesthetic for delivery and repair of an episiotomy, chloroform is used if given by one who is experienced in giving it, and if not ether is given.

If the patient is a multipara the dosage is reduced. Dilaudid grains 1/32 and scopolamin grains 1/130 is given and not repeated unless the labor is much longer than the average.

The allergic signs to scopolamin hydrobromid are accelerated pulse, marked flushing over the entire body, and a rise in temperature. I make it a practice not to repeat scopolamin hydrobromid if the initial dose accelerates the pulse to above 120. During labor the patient is given orange juice with added sugar and frequent drinks of water to prevent acidosis and dehydration. It is my belief that this technique of producing an analgesia is impractical for home deliveries and that instead, if a qualified nurse is available, nembutal without scopolamin should be used and that the same precautions should be maintained as though the patient were hospitalized. The best results seem to be obtained from an initial dose of 4½ grains followed when necessary by 3 grains and then not repeated. If a qualified nurse is not available and if the physician cannot spare the time to stay with the patient throughout an analgesia, I believe that no form of analgesia should be attempted. Morphine or dilaudid may be given during the first half of the first stage of labor with safety. This usually quiets the patient and instead of prolonging, speeds dilatation of the cervix. If the labor is premature, none of the above mentioned drugs can be used safely because of the impairment of respiration in the premature baby. Nitrous oxide and oxygen might be used during the second stage.

Following delivery any patient who has been administered an analgesic should be watched closely but not disturbed. If she be disturbed she often becomes irrational for as long as three hours post partum. It has been my experience that analgesia during labor almost entirely does away with the dread of labor in childbirth. The puerperum is shortened and is more normal.

No one respects chloroform more than I and, if given by an expert, to me it seems an ideal anesthetic for the short time required to repair and episiotomy wound. Local infiltration anesthesia is advocated by many, especially the staff of The Chicago Lying-In Hospital. Cyclopropane

and ethylene are good but should be used only in well equipped hospitals and should be given by an expert anesthetist.

Conclusion

1. Analgesia during labor protects the patient both mentally and physically.
2. No perfect analgesia is known today.
3. Patients should be watched closely after having had any analgesic agent administered to them.
4. Some form of anesthesia should be used at the termination of labor.

THE FRANKLIN COUNTY CORRESPONDENT

December 15, 1939.

Dear Dr. Brooksher:

Amazing as it may seem here is Franklin County Medical Society report for 1940:

We had our regular meeting December 12th at my office, holding our annual election of officers and everybody paid dues. I enclose herewith report and check for \$30.00 for all six of us.

We had a very good meeting with a good paper on Syphilis by Dr. Pillstrom.

We also had a meeting December 1st at Dr. Gibbons' office which was attended by some of the members of our Woman's Auxiliary. The women are going to do things. They propose to have a tea for us. And they are preparing to provide milk and warm lunches for the undernourished school children.

We want to do better things—and maybe we will.

Kindest regards,

Yours very truly,

THOS. DOUGLAS, Secretary,
for 45 years! No charges
brought against me!

COMING MEDICAL MEETINGS

Southern Sectional Meeting, American College of Surgeons, New Orleans, January 17th-19th.

Postgraduate Study Course, Arkansas Medical Society, Little Rock, January 24th-25th.

Mid-South Postgraduate Medical Assembly, Memphis, February 13-16, 1940.

The New Orleans Graduate Medical Assembly, New Orleans, February 26th-29th.

Arkansas Medical Society, Fort Smith, April 15-17th, 1940.

American Medical Association, New York, June 10-14th, 1940.

HEART DISEASES FROM WHICH THE PATIENT MAY RECOVER*

FRED WM. HARRIS, M. D.
Little Rock

Diseases of the heart continue to head the list as the cause of death. In 1937, The Arkansas Bureau of Vital Statistics reported 18,300 deaths. Of this number 2,615 or fourteen per cent were listed as due to heart disease. A review of the statistics indicates that deaths due to heart disease are on the increase. Therefore it is evident that heart disease is taking an enormous toll in human life. Generally death due to heart disease is inevitable, but there is a gleam of hope; there are some heart diseases from which patients may recover.

These diseases are: 1—Arterio-venous aneurysm, 2—rheumatic carditis in children, 3—myocarditis resulting from diphtheria, 4—hyperthyroidism, 5—beriberi, and 6—hypothyroidism.

The purpose of this study is first to review these diseases, and second to encourage the early diagnosis of them so that adequate treatment may be instituted which may enable the patient to recover. The writer claims no credit for originality in making this study.

Arterio-venous aneurysm: Wm. Hunter first recognized arteriovenous aneurysm as a direct communication between the artery and vein, calling it "aneurysm of anastomosis."

Prior to the World War arteriovenous aneurysm was seldom seen and was considered only from an academic interest by most physicians and surgeons.

Metas, "The Grand Old Man" of surgery, in 1925 enumerated the conditions in arteriovenous aneurysm that determine or influence the system. These conditions are (a) the size of the fistula; (b) the calibre of the vessel involved; (c) the proximity of fistula to the heart; (d) the duration of the fistula; (e) and the age of the patient.

Now arteriovenous aneurysm is considered a definite medical entity. A clearer understanding of the clinical picture and a greater interest into the secondary affects this cardiovascular lesion has led to intense laboratory research and better surgical technique. The clinical picture usually is one of injury by stab wound, gunshot wound, flying projectile, steel or glass splinters, with profuse bleeding usually easily controlled. Later thrill and bruit, continuous with the cardiac cycle, frequently develop. If the fistula is large enough,

it may lead to marked systemic effects, such as dyspnea, tachycardia, followed by dilatation of the heart and decompensation, and in turn invalidism and death if the lesions are not recognized and corrected.

Brandon reported an interesting case in 1938 which recovered completely with the heart returning to normal following surgical treatment.

Price, of London, reports a series of cases in *The Lancet*, 1937, in which he brings out that many years may pass from the time of the injury until cardiac symptoms appear. He stresses the importance of early operation of the aneurysm in order to prevent the cardiovascular changes which are an almost inevitable sequel.

Heninger and Cohn reported a case before the Southern Surgical Society of a white male bridge tender. The outstanding points were a marked enlargement of the heart, auricular fibrillation, and decompensation. The patient was operated on and had an uneventful convalescence. He has been rehabilitated as a bridge tender and has had no symptoms or evidence of organic heart disease.

Rheumatic Carditis in Children: Rheumatism in children manifests itself in different forms. The classical picture of rheumatic fever with one or more joints reddened, swollen, and tender presents no difficulty in diagnosis. Growing pains, arthritis, and chorea represent the rheumatic stage but other manifestations which are more vague in their interpretation may complicate the clinical picture. It is well to consider growing pains, arthritis, or vague muscular and joint pains, particularly if accompanied by low grade fever as a rheumatic condition, until proven otherwise. By some this may be considered too conservative but conservatism can do no harm until an accurate diagnosis can be made.

Rheumatic carditis in children is now recognized as one of the most serious complications of rheumatic fever. Rothbart states that rheumatism effects from one to three per cent of the children in large centers. This checks with Cahan's study of 350,000 children in Philadelphia in which 191 cases were diagnosed as heart disease, congenital or acquired; of these 147 were due to a rheumatic carditis. This figure may be accurate for the large centers of the North and East but is possibly too high for the South. Eighty per cent or more of all cases of rheumatic infection in children have some heart involvement arising during the first or subsequent attack. Early cardiac disease can be

* Read before the Sixty-fourth Annual Session, Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

missed by the usual bedside manner and may be discovered early only by special study such as the electrocardiogram and orthodiagram. To wait for definite clinical evidence of rheumatic heart disease is, in many instances, a loss of valuable time that may lead to irreparable damage and invalidism. Since the early diagnosis of rheumatic carditis and proper treatment may restore the heart to a normal function and prevent permanent damage it is well to review the treatment.

Treatment: Some form of the salicylates, absolute rest in bed, nutritious food, and general nursing care under cheerful surroundings until the acute stage is passed then a gradual return to graded exercise as tolerated. Valuable criteria in determining when the patient is able to begin exercise are, temperature not over 100° F. by rectum, normal pulse rate, normal sedimentation rate, hemoglobin of 70% or above. Cahan has listed a schedule of restriction of physical activities which is valuable in determining the schedule of activity for the convalescent rheumatic carditis child.

Myocarditis Resulting from Diphtheria: It is generally known by those familiar with severe diphtheria that the heart suffers serious damage, and that actual heart failure may be the immediate cause of death due to the damage to the myocardium and to the conduction system occurring in from two to three weeks, or even after convalescence has begun. Restlessness, apathy, abdominal pains, vomiting, pallor, cyanosis, dilatation of the heart, dysnea, gallop rhythm, engorgement of the liver, tachycardia, bradycardia, premature beats, and various grades of auricular-ventricular block are some of the manifestations of heart involvement. Auricular fibrillation has also been known to follow as another complication.

In 1927 Jones and White published the results of their studies of 100 young people who had severe or moderately severe diphtheria in hospitals and were given antitoxin five to eight years preceding their examinations. They found neither clinical nor electrocardiographic evidence of heart disease or conductive disturbance in any of their studies.

Thompson, Golden, and White, in 1937, examined the group previously examined by Jones and White, ninety-four of whom had been followed ten years after the previous study, and fifteen to twenty years after having had diphtheria. This group formed an ideal study inasmuch as it was known that they did not have

heart disease or conduction disturbance ten years previously. Their conclusions were that there were acceptable cases of the development of disturbed conduction during the course of diphtheria and that in very rare cases the disturbance persisted permanently, but as a rule there is no proof that conduction disturbances develop years after diphtheria, and no other evidence of myocarditis. The last study included in addition to the physical examination electrocardiograms and telegrams of each case.

Hyperthyroidism: The diagnosis of typical primary hyperthyroidism presents no unusual difficulties. The textbook history of loss of weight, with large appetite, increasing nervousness, palpitation, sensation of warmth, and excessive sweating, with the physical examination revealing activation, exophthalmos, hot moist skin, tremor, rapid pulse, and over-active heart are characteristic of hyperthyroidism. The masked form requires careful study and may be confused with heart disease, incipient tuberculosis and neuro-circulatory asthenia. The heat distress, nervousness, tachycardia and increased metabolic rate should put the physician "on guard." In addition, if one finds auricular fibrillation and hypertension with or without an exophthalmos, thyrotoxicosis should be considered. A diastolic pressure of over 100 mm. Hg. is alone certain evidence of hyperthyroidism.

The thyrocardiac, by definition, according to Hurxthal, is an individual with hyperthyroidism who has (1) established auricular fibrillation, or (2) congestive heart failure with or without auricular fibrillation. The classification is adopted in order to have some standard by which to judge the results of treatment.

The thyrocardiac has some enlargement of the heart but never as great as if found in the true hypertensive, or as in beriberi or arterio-venous aneurysm.

Early diagnosis of the thyrocardiac is exceedingly important. The great majority of them go into congestive heart failure with auricular fibrillation. Treatment includes rest in bed, Lugol's solution, and digitalis to establish compensation and to prevent thyroid crisis. Lahey stresses the importance of early operation to prevent damage to the heart and also surgery for the damaged hearts as soon as compensation can be established. Auricular fibrillation is not a contra indication for surgery if the heart is compensating. Hurxthal states that over fifty per cent of the cases in which auricular fibrillation

is found will return to normal after operation, although no medication is given to inhibit fibrillation.

In the follow-up study of 305 cases operated some years ago, more than two-thirds were living and well from two to ten years after operation. A large proportion had had congestive heart failure before operation.

Beriberi: Beriberi is a disease of vitamin B-1 deficiency. In 1913 Vedder described beriberi as being due to vitamin B-1 deficiency and since his monograph appeared it has been recognized as the etiological factor. At the present time it is generally known that beriberi exists in the occident as well as in the orient. Charles Keefer of Peiping, China, described the outstanding characteristics of the beriberi heart as one of great dilatation with decompensation. This type of cardiac insufficiency is caused by changes in cardiovascular system which are dependent on a deficiency diet. Briefly, the pathological changes in beriberi are (1) the degeneration of the peripheral nerves, including both the motor and sensory nerves; (2) edema of subcutaneous tissues and muscles, and effusion of fluid into the serous cavities; (3) dilatation of the heart, particularly of the right side with fatty infiltration and a moderate degeneration of the myocardium. These changes lead to peripheral neuritis, edema of the tissues and signs of cardiac insufficiency.

Inasmuch as beriberi is a strict vitamin B-1 deficiency disease and is not generally seen in the United States, it is possible that many masked cases are being missed. There have been groups of cases reported in some of the various states and from time to time a sporadic case reported. Hull and others of New Orleans reported a group of several cases found in southern Louisiana. The writer suggests that it is well to think more of beriberi in alcoholic addicts as well as in nutritional deficiencies. Romano found that 58% of 131 alcoholic addicts admitted to Colorado Psychopathic Hospital presented evidence of neuritis. Using this criteria, Jolleffe and Goodheart found that 61.6% of 1,000 consecutive males admitted to the alcoholic ward of Bellevue Hospital in the fall of 1935 had polyneuritis. Since the polyneuritis of the alcoholic addict and of the beriberi are identical as to cause, clinical course, and pathological changes, and since cardiovascular disturbances are prominent in the disease labeled beriberi, one would expect to find in alcoholic addicts the cardiovascular disturbances described as occur-

ring in patients with beriberi in other parts of the world. That these disturbances occur is indicated by reports of Jones and Sure, Weis, and Wilkins, and Jolleffe and Goodheart. In the latter study it was found that about one-third of 65 subjects having polyneuritis demonstrated clinically some degree of cardiovascular disturbance secondary to vitamin B-1 deficiency. On the other hand, evidences of cardiovascular disfunction were minimal in alcoholic addicts who showed none of the stigma of alcoholic addiction, (that is, polyneuritis, alcoholic encephalopathy, Korsakoff's syndrome, pellegra and sclerosis of the liver).

It seems logical to deduct that alcoholic addicts suffering from vitamin B-1 deficiency may be successfully treated for heart disease as well as polyneuritis with vitamin B-1. It is definitely thought that all cases of heart disease due to beriberi can be restored to normal function by the administration of vitamin B-1.

Treatment: It is interesting to note that in Keefers' work in 1930 that patients when put to absolute rest in bed on a beriberi diet the heart decreased in size and symptomatically the patients improved and the heart was able to do its work. The recent work done by Hashimoto and Takyo and Romano of Colorado, and Jolliffe and Goodheart of New York all report that when patients are given vitamin B-1 they not only improved but remained symptom free when doing normal labor.

Hypothyroidism: Myxedema or hypothyroidism is a disease of the glands of internal secretion. Amusingly it may be described as the dwarf brother of thyrotoxicosis. It is characterized by a low metabolic rate, dryness of the skin, hair and nails, extreme sluggishness, usually by a deposit of fat on the breast and hips, low blood pressure, slow pulse, and in cardiac involvement a shortness of breath, general weakness, and in the advanced cases by marked enlargement of the heart with general anasarca. The teleograms in the myxedema cases show a marked enlargement and the electrocardiogram shows a diminution in the amplitude of all the waves. It is not unusual to find all complexes, except the QRS approaching the isoelectric line. Myxedema may be confused with pericardiac effusion and congestive heart failure. The patient who presents a problem in diagnosis, particularly when decompensated with enlargement of the liver and serous effusions into the greater cavities may well be placed in or out of the hypothyroid disease, by doing a series of metabolic rates. If

the Basal Metabolic Rate is minus 20 or below hypothyroidism must be considered.

Treatment: Few diseases respond to treatment as spectacularly as the myxedema cases when placed on thyroid extract. The dosage, of course, varies with the individual and the metabolic rate. Improvement may be expected within two weeks after thyroid therapy has been started. It is suggested that frequent metabolic rates be done in order to more intelligently administer the dose of thyroid. It is well to keep in mind the importance of continuance of thyroid therapy. Evans of London has ably proven, as illustrated by the teleograms and electrocardiograms that if thyroid is discontinued the heart again will enlarge and the myocardium lose tone. And again when thyroid therapy is continued the heart will decrease in size and its function return to normal.

Summary and Conclusion: There are several heart diseases from which patients may recover.

Early diagnosis is essential in each case to prevent heart damage. When heart damage is present, early diagnosis and adequate treatment may restore the heart to normal function. This is true particularly in myocardial damage due to diphtheria, rheumatic carditis in children, the thyrocardiac, myxedema heart, in beriberi and in arteriovenous aneurysm. Reversible cardiac enlargement has been demonstrated in arteriovenous aneurysm, beriberi, and myxedema.

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RESOLUTION

With feelings of deepest regret, the Pulaski County Medical Society must record the passing of one of its most distinguished members, our beloved and respected associate, Dr. A. C. Kirby, who died on November 3, 1939.

Because we realize to the fullest extent the benefits which our Society, and the entire community, have derived from the labors of this tireless worker who gave unstintingly of himself whenever called upon in the line of duty and because of the warm personal feeling inspired in our hearts by his kindly, unselfish life; be it

RESOLVED: That we inscribe upon our records this tribute to his memory that future generations may know and appreciate his splendid self-effacing character, his many benevolent deeds, not only as an outstanding practitioner of the diseases of children which was his special field of endeavor, but also his many acts of kindness towards hosts of friends whose respect and esteem he enjoyed. And,

RESOLVED: That a copy of these resolutions be transmitted to the family of deceased associate, together with the assurance of our sincerest sympathy.

May our Heavenly Father console them in their present sorrow, and may these words of appreciation and high regard be a solace in the years to come.

PAUL J. MAHONEY,
R. J. CALCOTE,
SAM PHILLIPS.

A STUDY OF BACILLARY DYSENTERY

L. D. MASSEY, M. D., Osceola
HORTENSE LOUCKES, Technician

The causative factor of bacillary dysentery was first determined in 1898 by Shiga in Japan, and was followed in 1899 by Flexner in the Philippines. Because of the prevalence of bacillary dysentery of Shiga and other types, with the associated unfavorable mortality, the physicians of the southern section of the United States have, for a number of years, been seeking some treatment effective both in prophylaxis and therapeutics.

According to Duval, the term bacillary dysentery implies the infection of the bowels with the specific bacillus which was discovered in 1898 by Shiga, who isolated and proved its relationship to the disease by positive agglutination reactions with the blood of the patient. Duval states, and it is clinical experience, that bacillary dysentery is not caused solely by the bacillus originally isolated by Shiga, but also by a number of bacilli, which, though racially different, belong to one and the same bacterial species. While all members of the group are pathogenic, and cause what is known clinically as bacillary dysentery, the Shiga strain is regarded as the exciting cause of the more severe clinical form of the infection. On the other hand, the sporadic type of the disease is commonly caused by some of the other bacilli of the group.

Bacillary dysentery may manifest itself as an acute, sub-acute, or chronic infection of the lower bowel, characterized by fever, leukocytosis and diarrhea. It does not give rise to a septicemia. It affects all ages but particularly the very young and the very old.

The excitant of bacillary dysentery is spread through the dejecta and is included in the so-called water born diseases. It is distributed probably by food and flies and it has been proven that commode seats are the direct contact source from infected individuals or carriers to particularly young children, especially is this true where infected colored servants are employed in the household. The attendants and servants of the patient should not be permitted to prepare food for other members of the family. The patient should be isolated.

The pathology in bacillary dysentery is essentially an acute inflammatory process of the large intestine which is characterized by mucosal

ulcerations and necrosis. It is most frequently limited to the large gut, but occasionally there is inflammation in the small intestine. Pathologic lesions have been observed as far up as the pylorus. In the severe type early characteristic pathology is focal necrosis of the solitary follicles of the large bowel mucosa. Capillaries in the necrotic area become thrombosed, and the thrombi extend down to the exit of the vessels from the submucosa. Hemorrhages are due to the unplugging of the thrombosed capillaries in the floor of the ulcer. Perforation of the bowel is almost unknown in this disease. This destruction of the mucous membrane by ulceration and necrosis may be one of the causes of distal ileitis or colitis, either acute or chronic. Acute distal ileitis with mesenteric lymphadenitis is seen usually only in bacillary dysentery.

In the bacteriological examination, cultures were taken direct from the intestinal ulcers by means of protoscope and swabs and carried through the usual laboratory routine of Eosin Methylene Blue plate, Russell's Double Sugar, differentiating sugars, and agglutinations with immune serum. Serology is of little or no diagnostic value as the patient's serum fails to agglutinate the organisms until the tenth day of the disease, or later.

All types run from the mild to the severe. The symptoms of the mild type are; increase in temperature, listlessness, nausea and vomiting, abdominal pain, and frequent stools which soon become bloody. The symptoms of the severe type are; sudden onset, a high septic type temperature, severe toxemia and prostration, with headaches or convulsions, nausea and vomiting, tenesmus, and fifteen to thirty stools per day.

Dr. Joseph Felsen describes it as follows: "The patient is generally quite emaciated and dehydrated from frequent, watery evacuations. His pallor, hollowed cheeks, and sunken temples form an almost funereal background to an expressionless face, or to a worried look which betokens great physical discomfort."

There is a leukocytosis and the first signs of improvement are the lowering of the leukocyte count and a decrease in the number of stools with the disappearance of blood from the stools and the appearance of fecal material. In some cases the disease becomes chronic with its succeeding symptoms of inanition and chronic diarrhea.

The diagnosis of dysentery is made from clinical symptoms (rapid onset, with bloody and

frequent stools), and the type of dysentery is confirmed by stool examination. However, Silverman has reported as a diagnostic method, the use of skin tests, given by the intercutaneous method, which show sensitivities to bacillus dysentery in cases of infection by this organism. Its control is largely dependent upon early and accurate diagnosis, and requires the assistance of a laboratory whose personnel are experienced in detecting these organisms.

In June, 1932, Professor A. C. Ivy of Northwestern University, stated that during the course of a study of the affects of filtrates of Shiga bacillus on the motility of the gastro-intestinal tract of dogs, and during the courses of study by Crandall on the use of sodium sulfocyanate to determine "free water" in the body it was discovered that dogs which had received the sodium sulfocyanate, four to five weeks previously, failed to react in the usual manner after receiving lethal doses of the toxic filtrate. As a result of this observation Ivy and his coworkers stated that the drug should be valuable in the human if given in doses of 20 mg. intravenous or 60 mg. orally per kilogram of body weight, up to, and not exceeding, 1 gram per day, and is not dangerous or contraindicated. On this basis with the assistance of Dr. Mitchell it has been carried out in the human for five years and is of definite prophylactic value. The mortality rate has been reduced to 4%. Sodium sulfocyanate gave the best results in treatment when used in the first twenty-four hours.

The usual treatment instituted was the use of the sodium sulfocyanate, absolute bed rest, forced fluids, with the addition of Ringers solution by mouth, fruit juices, strained soups, jello, cereals, baked potatoes, and milk. The diet should consist of proteins, with a small amount of carbohydrates at first which are gradually increased, and should be almost entirely lacking in fat which is also increased as the patient improves. Vitamins, concentrates, were given in heavy doses. Ringers solution and glucose intravenously; and blood transfusions were used when required. Opium in some form was used for pain and tenesmus.

CONCLUSIONS

1. Acute bacillary dysentery is prevalent the year round in the eastern coast of the United States. In northeast Arkansas and southeast Missouri it is most severe in the months of May and June, with a second occurrence in September and October. From 1932-1937 the pre-

dominating organism was Shiga. In the year 1937 Flexner predominated.

2. At no time has milk, food, or water been found to be the direct source of infection in this territory. The infection is evidently spread through direct contact of person to person, or commode seats and flies.

3. The man-hour-time-loss due to this infection in the month of May, June and July cannot be determined accurately, but is of such proportion that it is alarming and crippling to industry and production.

4. The total death rate for the past six years listed as dysentery and diarrhea, has lead the group of most frequent causes of death for Mississippi County, Arkansas.

5. General public must be educated to bacillary dysentery as an acute disease of the bowels and not due to green vegetables or spoiled food, and that diarrhea does not always persist but that constipation may be present.

6. While no specific claims are made for sodium sulfocyanate in bacillary dysentery the drug has no contraindication and no untoward reaction in the doses recommended, and has very definitely proved of value when used as a prophylaxis, and in the first twenty-four hours of the disease.

7. Only through continued discussion in the medical circles as to the frequency of the disease and stool and swab cultures with the education of the public as to its severity and its chronic complications will be able to control these outbreaks.

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POSITION WANTED—By graduate nurse with eight years' experience as surgical supervisor, four years' experience as assistant to superintendent of nurses and six years' experience as anesthetist (Graduate, Charity Hospital of Louisiana School of Anesthesia and member of American Association of Nurse Anesthetists.) Jessie M. Thomson, R. N., 5200 Edgewood Drive, Little Rock, Arkansas. Phone 3-5427.

THE AUTHORITY OF A SUBPOENA

HON. PETER A. DEISCH

Helena

The process by which the attendance of a witness is coerced to attend court and testify is called a subpoena, and when it is properly served by an officer, the witness must attend and give his testimony, or he will be in contempt of court.

Service of the subpoena is made (1) by the officer showing the original, and stating the substance thereof to the witness, or (2) by personal service over the telephone, whenever the same can be done.

A subpoena may be served by the sheriff, coroner, or any constable of the county. It will be observed that there is an inconsistency in the method of service; that while the officer must exhibit the subpoena, when he serves it personally, and must state the substance thereof; that when he telephones to the witness, and obtains service in that manner, he is not required to exhibit the paper to the witness.

The service of a subpoena must in all cases be personal. For instance, the service of a subpoena on the officers of a corporation or association could not bind its members to appear as witnesses.

A witness may not be obliged to attend, except in the county of his residence or an adjoining county, on the trial of a civil action; nor to attend to give his deposition out of the county where he resides, or where he may be when the subpoena is served on him. However, in a criminal case, the attendance of a witness residing in any part of the State may be coerced without tender of fees.

One of the duties which a citizen owes to his government is to support the administration of justice by attending its courts and giving his testimony whenever he is properly subpoenaed.

It is an inherent power of courts to compel the attendance of witnesses necessary to the trial of causes before them.

The professional man, in the discharge of his duty as a good citizen, is, like any other person, compellable to attend court in obedience to subpoena, and testify as to what he may know for the same fees as others, and professional men are entitled to no extra compensation when they are called to testify to an opinion founded upon special study, or to state the result of scientific or professional examination.

A physician and surgeon cannot be required, as such physician and surgeon, to examine the case and use his skill and knowledge so as to form an opinion. He cannot be required to make any preliminary preparation, nor be compelled to attend a court trial and listen to testimony, in order that he may thereby be better enabled to testify as an expert.

If a private litigant desires a physician to prepare himself in advance of the giving of his testimony, the private litigant must arrange with the witness beforehand. In such case it is a matter of bargain, which, as ever, it takes two to make, and to make unconstrained.

But a professional man is not entitled to demand extra compensation before testifying to facts within his knowledge, although it may have required professional study, learning or skill to ascertain them. The expert is legally bound to answer, without extra compensation, questions as to the effect of wounds, medicines, etc.; in other words, give his opinion. He can testify as to such opinion as he may have, or give proper impromptu answers to such questions as may be put to him; he could state that he had made no particular study recently, and that until he did so his opinion would not be authoritative. By thus getting into the record, the deficiency of an opinion for which no recent preparation had been made, the expert can deprecate its value for most purposes. But such information as he already possesses, that is pertinent to the issue, he can be made to give, whether such information is peculiar to his trade or not. *Flinn v. Prairie county*, 60 Ark. 206; 27 L. R. A. 669; 39 L. R. A. 120.

Thus, a physician called upon as a witness can be legally required to do no particular thing, as to analyze the contents of a stomach or perform a post mortem examination, by the ordinary process of subpoena and the payment of an ordinary witness fee.

A witness possessing knowledge of facts material to the vindication of the rights of another may be compelled to appear and give evidence in behalf of that other party, notwithstanding the evidence thus coerced may uncover the witnesses' private business.

This was brought out in the recent trial in Texas, where Dr. Brinkley was suing Dr. Fishbein for libel. A witness in that case, originally from Pine Bluff, had a secret preparation for the treatment of tuberculosis, and he was required to produce documents concerning it, although

he protested that it was depriving him of his property rights.

A subpoena may command a person who has in his possession or control some book or paper which is pertinent to the issues of the pending controversy, to attend and produce it for use at the trial. He cannot refuse to comply on the ground that compliance will result in the disclosure of valuable secrets, or otherwise adversely affect his pecuniary interests.

If the witness has doubts as to whether or not he should produce the documents called for, he may submit it to the inspection of the court, and obtain a decision of the question of its production. 70 C. J. 56.

The fee to which a witness is entitled is \$1.50 a day, when appearing before the circuit or chancery court; \$1 a day before the county or probate court; and \$0.50 for attending before a justice of the peace court. "No witness shall be allowed mileage for attendance in any cases within the limits of the county in which he may reside." A witness subpoenaed to attend without the limits of the county within which he resides shall receive 5c per mile for going from and returning to his residence by the most direct route.

A witness who has once been duly served with a subpoena, and who attends in obedience thereto, must remain, if he is wanted, after the day named in the subpoena for his attendance, without being served with a new subpoena, except that a party who permits his witness to depart cannot have him attached for contempt in leaving.

The officer is not required to make a tender of the legal fees in order to make the service of a subpoena valid, although the witness may demand his fee and if it is not paid in advance, he may refuse to attend. But in our State he must clearly give notice that he will refuse to appear without advance payment, or he will be liable for punishment.

Disobedience of a subpoena, or a refusal to be sworn, or to answer as a witness may be punished as contempt of the court. Concealing himself, or otherwise intentionally evading the service of a subpoena, if it be shown that he concealed himself, or otherwise intentionally evaded the service of a subpoena, may be punished by the court as a contempt.

In addition to this punishment (Pope, sec. 5172) when the party causing any witness to

be subpoenaed shall have paid or tendered to such witness legal fees for travel and one day's attendance, at the time of subpoenaing him, such delinquent witness shall be liable to such party for all damages sustained by reason of his non-attendance, unless he show sufficient cause to justify such absence.

A witness cannot excuse no-attendance on the ground that the testimony sought from him is immaterial, or will not be of any benefit to the party subpoenaing him, or that the matters as to which he is wanted to testify are privileged, or will tend to incriminate him.

Physicians and trained nurses shall not be compelled to disclose any information which he or she may have acquired from a patient while attending in a professional character and which information was necessary to enable him to prescribe as a physician. Provided, if two or more physicians or nurses are, or have been in attendance on the patient for the same ailment, the patient by waiving the privilege attaching to any of said physicians or nurses, by calling such physician or nurse to testify concerning said ailment, shall be deemed to have waived this privilege. Pope, sec. 5159.

RESOLUTION

On November 8, 1939, the Pulaski County Medical Society was bereaved of one of the most beloved members by the death of Dr. Frank O. Rogers. On such occasion we of the Society wish to pay tribute to his memory.

We are grateful for our association with Dr. Frank and we feel that we have lost a great inspirational character from the field of medicine. His have been many high honors and these he filled with honor and to the credit and enduring benefit of the Society and the profession. It is difficult to pay proper tribute to one so worthy. He had been a member and regular attendant of the Society for many years and was one of the finest friends the Society ever had. He possessed all the beauties, glories, and virtues of a Christian gentleman and such sweetness of spirit and loyalty and devotion to his profession that he filled the hearts of his fellow doctors. He was truly a friend and co-laborer of us all and as time goes on we, who loved him, shall spend many happy hours living in memory of our dear departed friend.

We of the Pulaski County Medical Society hereby express our sincerest regrets and extend to his loved ones our deepest sympathy. May his memory be blessed.

Respectfully submitted,

COMMITTEE ON RESOLUTIONS.
DR. B. A. BENNETT, Chairman.
DR. H. FAY H. JONES.
DR. M. J. KILBURY.

THE JOURNAL

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EDITORIAL

HEALTH LEGISLATION IN CONGRESS

There is much speculation as to the nature of health legislation which will undoubtedly be introduced in the coming Congress. Further study and deliberation has quite likely impressed many Senators and Congressmen with the fact that the Wagner bill is naught but a loosely-drawn, impractical approach to the problem of national health and medical care. Yet, with the propagandists now more active than ever, beseeching that something be done for the health of the nation, these same legislators may vote, as a matter of political expediency, for a bill even more undesirable than is the Wagner bill.

At this time, announcement of the platform of the American Medical Association should do

much to strengthen the position of organized medicine in the fight which lies ahead. A strong statement of affirmative policy, this platform shows that the organized medical profession has not adopted a negative attitude in its efforts to solve the problem of medical care. The medical profession realizes that a problem of this magnitude with so many complicating factors can only be worked out along general principles. These are now available and with the "Ten-Points" for criteria of new medical services, provide state and county medical societies with a master plan whereby they may proceed to institute such changes in the plan of medical care as now available which their judgment may consider wise, proper and designed to insure the welfare of the public.

MEMBERSHIP ASSESSMENTS ARE DUE

Annual assessment of membership in your county and state Society is now due and should be promptly paid to your county society secretary. By constitutional provision such members who do not make payment of this assessment by March 1st, become delinquent. Other than the loyalty and evidence of support of the policies of organized medicine which prompt renewal of membership signifies, there are other tangible reasons why memberships should not be allowed to lapse.

First. The 1940 edition of the Directory of the American Medical Association is now in preparation. Unless the assessments of individual physicians are received in the office of the state secretary at an early date, their names will appear in the Directory in small type, indicating nonmembership. Every member of organized medicine wishes to avoid this since the Directory is the source for information on the professional status of all physicians.

Second. The continuation of your physicians' malpractice insurance contract is contingent upon retention of your membership in the Arkansas Medical Society. You will not want to lose this protection.

Third. The work of the Society is hampered if there is lapse in the numerical strength of its membership.

Fourth. Fellowship in the American Medical Association and many other special societies rests upon continued affiliation with the county and state society.

PLEASE SEE YOUR SECRETARY NOW.

NATIONAL PHYSICIANS' COMMITTEE FOR THE EXTENSION OF MEDICAL SERVICE

Every physician has received the letters and pamphlets of this body and has noted the outstanding physicians who comprise the Committee. It may be advisable to comment on the purposes of the Committee.

With the continuation and intensification of the drive by propagandists to change the present form of medical practice through various legislative proposals it has become increasingly evident that organized medicine must take the offensive. Individual physicians and component county organizations have been urged to discuss these matters with their patients and with the public at large for several years. The task is a huge one and has not been well carried out to date. Medical men must proceed in a campaign of public enlightenment, contrary to established views of the profession, with the definite aim in view of answering the unfair and unjust statements which have been made against medicine and also to lead the way in the continued, orderly development of medical services to meet the needs of the people in a far wider application.

A campaign of this type is naturally radically different from the usual objectives of organized medicine which are more or less solely concerned with the advance and dissemination of scientific knowledge. It has been but logical, therefore, to develop another organization whose sole duty shall be to remind the public of the eternal difference which exists between private and governmental practice of medicine, and that our present, satisfactory plan of medical care by private physicians must continue, if medicine is to maintain its progress.

The National Physicians' Committee for the Extension of Medical Service has therefore been formed for the promulgation of the ideas and views of the organized medical profession on medical service to all the people. The preliminary effort of the Committee is the material which has been mailed to all physicians. Individual physicians are invited to give the Committee their support.

HEALTH TALKS OF THE ARKANSAS MEDICAL SOCIETY

Is your local paper publishing the weekly Health Talks sponsored by the Society? If not, your editor will most probably be influenced to publish them on your request. If he does publish them regularly, have you personally thanked him for this appreciated cooperation?

EDITORIAL COMMENT

POSTGRADUATE STUDY COURSE

Announcement is made that the next Postgraduate Study Course sponsored by the Committee on Postgraduate Study of the Society will be held at the University of Arkansas School of Medicine, Little Rock, January 24th-25th. Guest speakers who have thus far accepted invitations are: Dr. Ferdinand C. Helwig, Kansas City, Missouri, and Dr. Charles F. Geschickter, Baltimore. The program will consider miscellaneous subjects considered most likely to be of interest to the general practitioner. The committee has made every effort to make this meeting, as it has each past session, one of practical every-day benefit to the members of the Society. Attendance has not reached a figure which the committee seeks to attain. Every member of the Society is urged to attend this two-day session. The final complete program will be mailed all members in advance of the meeting.

OBITUARY

WILLIAM FRANKLIN AKIN, aged 65, died at his home in Branch, November 13th after an extended illness of several years. He had carried on in practice until about three months prior to his death. A graduate of Memphis Hospital Medical College in 1904, he had practiced in Franklin County continuously since graduation. Surviving relatives are his wife and three sons.

WILLIAM COLUMBUS HALTOM, age 70 years, died at his home in Jonesboro November 19th of heart disease. Born near Jackson, Tennessee, he taught school prior to entering the Memphis Hospital Medical College from which he graduated in 1900. In addition to his membership in the Craighead-Poinsett County Medical Society and the Arkansas Medical Society, of which organizations he became an honorary member in 1937, he was a member of the First Methodist Church. He had been active in development of real estate in Jonesboro. Surviving relatives are his wife, and a son, Dr. W. L. Haltom, of Martinsburg, West Virginia.

PROCEEDINGS OF SOCIETIES

Jefferson County Medical Society has elected the following officers: President, H. T. Capel; Vice-president, B. D. Luck, Jr.; Secretary-treasurer, T. J. Cunningham, Jr.; Delegate, J. M. Lemons, and Alternate, W. H. Bruce.

The Benton County Medical Society met in dinner session at Bentonville December 14th for a paper "Sulfapyridine" by J. L. Pickens.

Geo. M. Love, Secretary.

The Ninth Councilor District Medical Society met at Harrison December 5th for the following program: "Diagnosis and Treatment of Goiter," Geo. V. Lewis, Little Rock; "Blood Stream Infections," M. J. Kilbury, Little Rock; "Jaundice," J. N. Compton, Little Rock, and "Newer Measures in the Diagnosis and Treatment of Pneumonia," Chas. T. Chamberlain. A joint meeting of the Society and Auxiliary was addressed by D. W. Goldstein, Fort Smith, on "Cancer." An evening banquet followed the scientific session.

Morris Fishbein will address the annual banquet session of the Sebastian County Medical Society at Fort Smith, January 11th. Members who may wish to attend are requested to make reservations through Dr. Ralph E. Weddington, 1425 North 11th Street, Fort Smith.

The Southeast Arkansas Medical Society was addressed November 20th by D. T. Hyatt, Little Rock, on "New Drugs Used in the Treatment of Pneumonia."

The Annual Conference of the Arkansas State Board of Health held in Little Rock, December 11th and 12th was addressed by: A. S. Buchanan, Prescott; J. D. Riley, State Sanatorium, "Public Health Aspects in the Control of Tuberculosis"; K. W. Cosgrove, Little Rock, "Trachoma in Arkansas"; D. W. Fulmer, Little Rock; B. M. Stevenson, West Memphis; A. S. J. Clarke, Ozark; R. C. Kennerly, Camden; A. M. Washburn, Little Rock; L. L. Fatherree, Little Rock, "The Typhoid Carrier; the Epidemiological Aspects"; W. P. Scarlett, Morrilton; J. Q. Blackwood, Helena, "Clinical Management of Syphilis"; D. W. Dykstra, Little Rock; H. Lee Fuller, Little Rock, "The Tuberculosis Control Program"; E. J. Easley, Texarkana; J. F. Hays, Russellville, "Present Day Knowledge of the Active Immunizing Agents of Diphtheria"; M. G. Lawson,

Benton; T. T. Ross, Little Rock; Chas. R. Henry, Little Rock, "Unmet Needs in the Maternity Nursing Service" and W. B. Grayson, Little Rock, "Milestones in Public Health in Arkansas."

Receipt of membership assessments from Secretary Siegel on November 28th gives Johnson County Medical Society the honor of again leading the list for 1940.

The Lawrence County Medical Society was addressed November 14th by H. A. Stroud, Jonesboro, "Tuberculosis," and J. B. Elders, Harrisburg, "Details of the Public Health Personnel."

T. C. Guthrie, Secretary.

Bradley County Medical Society has elected the following officers: President, W. B. Reasons, Hermitage; Vice-President, Rufus Martin, Warren; Secretary-Treasurer, W. J. Hunt, Warren; Delegate, W. N. Roark, Hermitage, and Alternate, J. L. Hope, Warren.

The first county medical society to remit a 100% membership assessment report was Clay county. Other county societies making a 100% return in December were Franklin, Sevier, and Bradley, in order named.

The Sevier County Medical Society met December 12th in the offices of Drs. Jones and Kimball for the following program: "Bone Tumors," M. J. Kilbury, Little Rock; "Fixation of Fractures," F. Walter Carruthers, Little Rock, and "Diseases of Children," Don Smith, Hope. The following officers were elected: G. L. Kimball, DeQueen, President; C. A. Archer, DeQueen, Vice-President; J. S. Hendricks, DeQueen, Secretary-Treasurer; C. C. Hanchey, DeQueen, Delegate, and J. C. Graves, Lockesburg, Alternate.

Franklin County Medical Society has elected the following officers: President, W. H. Gibbons; Vice-President, E. W. Pillstrom; Secretary-Treasurer, Thos. Douglass; Delegate, W. C. Porter, and Alternate, Thos. Douglass.

Union County Medical Society has elected the following officers: President, H. J. Mayfield; Vice-President, J. B. Wharton, Jr.; Secretary-Treasurer, J. W. Harper; Delegates, J. K. Sheppard and B. L. Moore, and Alternates, E. J. Munn and A. D. Cathey.

The Southern Sectional Meeting of the American College of Surgeons will be held in New Orleans, January 17th, 18th, and 19th. Among the guest speakers will be: Geo. P. Muller, Philadelphia, President of the American College of Surgeons; Frank E. Adair, New York, Chairman of the Committee on Cancer; Frederic A. Besley, Waukegan, Secretary; Arthur W. Allen, Boston; Louis H. Clerf, Philadelphia; Edward D. Churchill, Boston; Claude C. Coleman, Richmond; William J. Engel, Cleveland; J. Derryl Hart, Durham; William H. Luedde, Saint Louis; Michael L. Mason, Chicago; Carl H. McCaskey, Indianapolis; John O. McReynolds, Dallas; Chas. L. Scudder, Boston, and Malcom T. MacEachern, Chicago. Members of the Arkansas Medical Society are cordially invited to attend.

The Ouachita County Medical Society met in regular monthly session at the Camden Hospital, December 14th. After a banquet the following program was rendered: "Management of the Premature Infant," Barney Briggs, Little Rock; "Coronary Artery Disease," Raymond Gregory, Little Rock. The following officers were elected: President, Dr. C. S. Early, Camden; Vice-President, Dr. R. H. Whitehead, Jr., Camden; Secretary, R. B. Robins, Camden; Delegate, Dr. R. C. Kennerly, Camden, and Alternate, E. J. Byrd, Bearden.

R. B. ROBINS, Secretary.

The Independence County Medical Society was addressed December 11th by Wesley J. Ketz, "The Prostate and the Kidneys"; F. Q. Wyatt, "Osteomyelitis," and O. J. T. Johnston, "Knife Blade in the Skull." Officers elected are: President, F. Q. Wyatt; Vice-President, C. A. Churchill; Secretary-Treasurer, J. J. Monfort; Delegate, L. T. Evans, and Alternate, E. M. Gray.

Little River County Medical Society has elected the following officers: President, P. H. Phillips, Ashdown; Vice-President, E. R. King, Ashdown; Secretary-Treasurer, J. W. Ringgold, Ashdown; Delegate, Herman Castille, Foreman, and Alternate, P. H. Phillips.

Lawrence County Medical Society has elected the following officers: President, J. F. Jackson, Walnut Ridge; Vice-President, T. Z. Johnson, Walnut Ridge; Secretary-Treasurer, T. C. Guth-

rie; Smithville; Delegate, J. C. Hughes, Hoxie, and Alternate, J. C. Land, Walnut Ridge. The December 12th session of the Society was addressed by J. C. Hughes on "Bronchitis."

T. C. GUTHRIE, Secretary.

The Pulaski County Medical Society met in regular session December 18th for the annual address of the president, Geo. V. Lewis, "Streamlining the Pulaski County Medical Society."

E. H. WHITE, Secretary.

Garland County Medical Society has elected the following officers: President, C. H. Lutterloh; Vice-President, Foster Jarrell, and Secretary-Treasurer, W. E. Gray.

Sebastian County Medical Society met December 12th, I. F. Jones presenting a paper on "The Management of Post-Partum Hemorrhage." Officers elected are: President, H. C. Dorsey, Fort Smith; Vice-President, T. P. Foltz, Fort Smith; Secretary, Ralph E. Weddington; Treasurer, W. R. Brooksher, and Member Board of Censors, B. L. Ware, Greenwood.

RALPH E. WEDDINGTON, Secretary.

The Garland County Medical Society was addressed December 12th by J. D. Riley, State Sanatorium, on "The Early Diagnosis of Tuberculosis."

Pulaski County Medical Society has selected the following officers: President, H. W. Hundling; Vice-President, G. W. Reagan; Secretary, E. H. White, and Treasurer, R. J. Calcote.

Mississippi County Medical Society has elected the following officers: President, L. L. Hubener, Blytheville; Vice-President, J. E. Beasley, Blytheville, and Secretary-Treasurer, F. D. Smith, Blytheville. This is the 21st successive year that Dr. Smith has been chosen secretary.

Cross County Medical Society has elected the following officers: President, Ruffin Longest, Wynne; Vice-President, Thos. G. Price, Wynne; Secretary-Treasurer, Thomas A. Peterson, Wynne; Delegate, Thomas Wilson, Wynne, and Alternate, J. S. Miller, Parkin.

PERSONALS AND NEWS ITEMS

Dr. S. J. Wolfermann, Fort Smith, has been appointed a member of the Council of the Southern Medical Association from Arkansas for a regular Council term of five years, the appointment having been announced recently by the President, Dr. Arthur T. McCormack, Louisville, Kentucky. Dr. Wolfermann succeeds Dr. W. T. Wootton, Hot Springs National Park, who, having served the constitutional limit, was not eligible for reappointment.

Fred H. Krock has been elected Chief of Staff of Sparks Memorial Hospital, Fort Smith, succeeding Chas. H. Holt, who has been made Emeritus Chief of Staff.

C. B. Billingsley, Fort Smith, addressed the Polk County Possum Club December 7th on "The Prevention and Treatment of Acute Possumphobia."

W. A. Ellis, Jr., Helena, has recovered from injuries received in an automobile accident October 28th.

W. B. Grayson, Little Rock, has been elected chairman of the Public Health section of the Southern Medical Association.

L. J. Kosminsky, Texarkana, recently addressed a public meeting sponsored by the P. T. A. organization at DeQueen on "Socialized Medicine."

With the regularity of many years' standing, F. D. Smith submitted his annual report as secretary of the Mississippi County Medical Society on December 6th.

Dr. and Mrs. G. R. Siegel and daughter, Clarksville, spent a November vacation in Washington and New York City.

A district conference of Kiwanis Clubs at Conway December 4th was addressed by J. J. Monfort, Batesville; Ralph E. Crigler, Fort Smith, and Raymond T. Smith, Fort Smith.

E. W. Wood, Marshall, has been elected president of the Blueblack Spellers Society.

P. M. Smith, Magnolia, recently addressed a meeting of the Highway 79 Association.

Ellery C. Gay has been elected second vice-president of the Little Rock Kiwanis Club.

J. D. Riley, State Sanatorium, recently addressed a Christmas Seal meeting at Bentonville.

Walter Cale has been elected a director of the Atkins Lions Club.

S. J. Wolfermann, Fort Smith, has been elected Ternero Carabao of the Military Order of Carabao.

S. G. Daniel was honored at a dinner celebrating his 72nd birthday at Marshall, November 2nd.

Joe B. Wharton, Jr., recently addressed the El Dorado Rotary Club on "Health Affairs in Union County."

Frank Vinsonhaler, Little Rock, recently addressed the North Little Rock Lions Club.

R. B. Robins, Camden, will give the first six lectures in a course on medical economics to the students at the University of Arkansas School of Medicine beginning in January.

Chas. T. Chamberlain, Fort Smith, addressed the Paris Rotary Club November 28th on "Heart Disease: A Public Health Problem."

Fred H. Krock, Fort Smith, attended the meeting of the Southern Surgical Association at Augusta, Georgia, during December.

Dr. and Mrs. S. M. Graves, Mount Levi, celebrated their golden wedding anniversary, November 28th.

G. R. Siegel, Clarksville, addressed the Alma Lions Club at its charter presentation ceremony.

Robert Hood, Russellville, addressed the Atkins Lions Club at its charter presentation ceremony.

The following were registered at the Memphis session of the Southern Medical Association: Sam J. Albright, Searcy; Hoyt R. Allen, Little Rock; Gean S. Atkinson, Manila; F. E. Baker, Stamps; A. F. Barr, Cherry Valley; C. E. Benefield, Fort Smith; B. A. Bennett, Little Rock; A. L. Best, Newport; W. M. Blackshare, Hot Springs National Park; Mitchell Blaine, Mammoth Spring; M. E. Blanton, Jonesboro; C. N. Bogart, Forrest City; W. L. Boswell, Clarendon; W. L. Brittain, Conway; H. C. Brooke, Conway; C. M. Brooks, Little Rock; W. R. Brooksher, Fort Smith; A. S. Buchanan, Prescott; N. B. Burch, Hot Springs National Park; J. H. Campbell, Joiner; P. B. Carrigan, Hope; F. W. Carruthers, Little Rock; Alan G. Cazort, Little Rock; H. A. Causey, Pine Bluff; E. J. Chaffin, Hughes; Chas. T. Chamberlain, Fort Smith; J. W. Cole, Prattville; J. N. Compton, Little Rock; Raymond Cook, Little Rock; W. P. Cooksey, Magnolia; K. W. Cosgrove, Little Rock; J. B. Crawford, Little Rock; W. S. Crawford, Marianna; J. C. Davis, Little Rock; P. L. Day, Little Rock; C. H. Dickerson, Conway; R. D. Dickens, Monticello; J. A. Dillman, Paragould; J. K. Donaldson, Little Rock; H. C. Dorsey, Fort Smith; S. W. Douglas, Eudora; C. S. Early, Camden; W. E. Ellington, Paragould; Ira W. Ellis, Monette; N. B. Ellis, Wilson; A. M. Elton, Newport; L. L. Fatheree, Little Rock; Geo. B. Fletcher, Hot Springs National Park; T. P. Foltz, Fort Smith; J. B. Futrell, Rector; E. C. Gay, Little Rock; A. A. Gilbert, Fayetteville; J. C. Gilliam, Des Arc; J. G. Gladden, Harrison; A. L. Goatcher, Plumerville; D. W. Goldstein, Fort Smith; E. M. Gray, Mountain Home; G. A. Gray, Batesville; Oscar Gray, Little Rock; W. B. Grayson, Little Rock; R. J. Haley, Paragould; C. W. Hall, Greenwood; F. W. Hames, Pine Bluff; T. S. Hare, Crawfordville; C. M. Harwell, Osceola; C. A. Hardesty, Paragould; F. P. Hardy, Searcy; M. C. Hawkins, Jr., Searcy; J. H. Hellums, Dumas; C. R. Henry, Little Rock; R. L. Hickman, Hickory Ridge; W. G. Hodges, Malvern; H. G. Hollenberg, Little Rock; H. H. Holt, Nashville; H. H. Howze, Fayetteville; L. L. Hubener, Blytheville; T. F. Hudson, Luxora; J. J. Hudgins, Paragould; H. G. Hummel, Little Rock; E. H. Hunt, Clarksville; R. H. Huntington, Fayetteville; F. L. Husbands, Blytheville; J. B. Jameson, Camden; O. A. Jamison, Tuckerman; I. R. Johnston, Blytheville; R. L. Johnson, Bassett; O. J. T. Johnston, Batesville; R. H. Johnston, Clarksville; F. H. Jones, Piggott; H. Fay H. Jones, Little Rock; J. K. Jones, Lepanto; M. F. Kelly, Sheridan; J. A. King, Elaine; R. R. Kirkpatrick, Texarkana; C. E. Kitchens, DeQueen; M. J. Kilbury, Little Rock; Edward Kultgen, Elaine; W. C. Langston, Little Rock; C. S. Laws, Texarkana; D. C. Lee, Hot Springs National Park; Ruth Ellis Lesh, Fayetteville; Vincent O. Lesh, Fayetteville; C. G. Leverett, Eudora; J. S. Levy, Little Rock; L. M. Lile, Hope; W. O. Loftis, Pocahontas; W. T. Lowe, Pine Bluff; C. H. Lutterloh, Hot Springs National Park; J. R. Lynn, Hazen; A. H. Maddox, Elaine; L. D. Massey, Osceola; C. B. May, Little Rock; Madeline M. Melson, Little Rock; O. C. Melson, Little Rock; B. C. Middleton, Texarkana; H. E. Mobley, Morrilton; J. A. Moore, El Dorado; E. J. Munn, El Dorado; N. E. Murphey, Clarendon; Pat Murphey, Little Rock; L. H. McDaniel, Tyrone; H. L. McLendon, Palestine; N. C. McCown, Forrest City; C. H. McDonald, Little Rock; Jim McKenzie, Hope; Mac McLendon, Marianna; L. C. McVay, Marion; W. V. Newman, Little Rock; A. C. Parker, Clarkedale; Orlie Parker, Wabbaseka; W. R. Parsons, Little Rock; R. Q. Patterson, Little Rock; T. G. Porter, Hazen; C. V. Powell, Round

Pond; C. H. Reagan, Marked Tree; L. D. Reagan, Little Rock; B. A. Rhinehart, Little Rock; D. A. Rhinehart, Little Rock; J. N. Roberts, Little Rock; Gaynelle Robertson, Little Rock; W. F. Robins, Ozan; B. L. Robinson, Little Rock; C. A. Rosenbaum, Little Rock; H. A. Ross, Arkadelphia; J. O. Rush, Forrest City; J. A. Saliba, Blytheville; J. H. Sanderlin, Little Rock; S. M. Sandford, Little Rock; H. W. Savery, Van Buren; R. E. Schirmer, Blytheville; W. P. Scarlett, Morrilton; W. J. Sheddan, Osceola; E. M. Smith, Hot Springs National Park; F. D. Smith, Blytheville; J. Murry Smith, Smackover; H. T. Smith, McGehee; Randolph T. Smith, Little Rock; Raymond T. Smith, Fort Smith; J. S. Southard, Fort Smith; J. E. Stevenson, Fort Smith; B. M. Stevenson, West Memphis; D. B. Stough, Hot Springs National Park; A. W. Strauss, Little Rock; E. J. Stroud, Jonesboro; P. T. Stroud, Jonesboro; J. A. Summers, Little Rock; E. B. Swindler, Stuttgart; F. S. Tarleton, Hot Springs National Park; A. B. Tate, Russellville; L. T. Taylor, Star City; J. L. Tidwell, Dell; H. King Wade, Hot Springs National Park; C. Mc. Wassell, St. Charles; E. L. Watson, Newport; R. H. Willett, Jonesboro; J. H. Wilson, Magnolia; J. S. Wilson, Monticello; S. J. Wolfermann, Fort Smith; R. P. Woods, Altheimer, and W. T. Wootton, Hot Springs National Park.

C. P. Sisco has been elected president of the Springdale Townsend Club.

Geo. M. Love, Chief of the Rogers Fire Department, addressed the recent annual banquet session of the department.

Dr. and Mrs. Harry E. Murry, Texarkana, spent a recent vacation in Philadelphia, New York, and Atlantic City.

H. Fay H. Jones, Little Rock, addressed the Muskogee (Oklahoma) Academy of Medicine, December 8th.

C. B. Billingsley and Ralph E. Crigler have been elected first vice-president and secretary, respectively, of the Fort Smith Boys' Club.

Dr. and Mrs. O. H. King, Hot Springs National Park, recently celebrated their silver wedding anniversary.

W. H. Mock, Prairie Grove, addressed a meeting of the Frisco Employees at Fayetteville, December 9th.

"Venous Mesenteric Occlusion," by J. K. Donaldson and E. B. Sive, Little Rock, appeared in Surgery for July.

T. E. Fuller has been elected third vice-president of the Texarkana Chamber of Commerce.

G. S. Atkinson has been elected a director of the Merchants and Planters Exchange at Manila.

R. J. Calcote has been elected a director of the Little Rock Chamber of Commerce.

A Pathological Seminar will be conducted at Little Rock, January 26th, by Dr. Charles F. Geschickter of Baltimore, using the methods which Dr. Geschickter has employed for a number of years in these reviews. The fee will be five dollars. Interested physicians should write Dr. M. J. Kilbury, 926 Donaghey Building, Little Rock.

RANDOM THOUGHTS OF THE SECRETARY

November 23rd. For Roosevelt's Thanksgiving, we go to Memphis observing R. R. Kirkpatrick early on the job as he was at Texarkana in 1938. At the Auditorium we meet many an Arkansas physician, H. T. Smith and J. C. Gilliam talk of the Farm Security, while F. D. Smith boasts of the greatest membership ever from Mississippi County, as it is. The commercial exhibit unique in that there are no sample hounds chasing from one booth to another and a more deliberate, calm air attends the room. Delivering ourselves of a talk before the radiologists, supported by Arkansas colleagues, Goldstein, Rhinehart, Wilson and Wolfermann. Hitch-hiking to North Little Rock with Fay Jones, as assurance of easily-traveled miles, overtaking Frances and Charlie Chamberlain there, we avoid a bus trip home and enjoy all the pleasantries which 160 miles of travel with this couple affords, by more thumb-jerking.

November 25th. Visiting Amis who bumped his head with much force against a windshield the other night and who has been miserable with himself all this day, those old lady sickroom visitors, Eberle and Jones, having called to his attention the potentialities of head injuries, such as subarachnoid hemorrhage, latent epilepsy and the like.

November 28th. Casting about for a fellow-traveler to Clarksville, we ask Chamberlain to query his group for us. Marvel of taciturnity that he is, he does this by telling the phone girl to see that each member of the Holt-Krock Clinic calls us during the afternoon, which they do. May Chamberlain be forced to answer countless thousands of useless phone calls for this act. Anyway, to Clarksville where we join in staff meeting at the new hospital, an enthusiastic gathering, especially distinguished in that the Johnson County Medical Society makes payment of 1940 membership assessments, easily the first. With Weddington, we stop at the Green Cottage, definitely the last word in lunch stands, compact, clean, pleasant, a cup of coffee and a hamburger fortifying us for the drive home.

November 30th. This man Roosevelt seems to get what he wants. Today, Arkansas' Thanksgiving, turns out drab and dreary, as if to chide us for not taking the first festival day in the series. So dreary is the day that we fail to attend the Hot Springs-Fort Smith football game, an occasion which brought no Thanksgiving in the "City Of Vapors," leaving us one up on Euclid Smith and George Fletcher.

December 4th. With abundant heckling and spirits characteristic of the holiday season, the staff at Sparks holds a gay session, in which Foltz, with our support, drafts Chamberlain for the sought-after office of secretary. May he keep it permanently!

December 8th. This being our natal day we sit with the Council all afternoon, a meeting attended by Parmley despite all protests to the contrary, and darn if we do not believe that it helped him to be there and unload some of the stuff he has been carrying around the past two months. Departing in haste, we find it difficult to get a cab to the station. Was it not the same city council which visited the jail last week which once said that Little Rock had enough taxicabs? So, hitch-hiking once again, this time with R. Q. Patterson who delivers us to the station with two minutes to spare. Home by ten, remembered on this day by I. F. Jones with a statement most appreciated.

December 11th. We move this day, taking over more territory for the young idea to shoot his arrows. Aided in the later stages of the day by Elizabeth Wolfermann and Frances and Charles Chamberlain, making the affair a holiday occasion. For later in the night, the excitement having somewhat subsided, we are lulled to sleep by the rustling and falling of the leaves and frequent thuds as acorns drop.

December 12th. Jones gives an excellent resume on post-partum hemorrhage, leaving us completely in the lurch for a point of discussion, the closest we can approach being the roentgen diagnosis of placenta praevia. This is a matter of amazement to all present, as is our surprise when our nomination as treasurer comes from Hoge, the first time in several years that we have not been forced to do our own nominating.

December 17th. Encamped atop Norristown mountain south of Russellville, a spot with much of Arkansas history, now associated for the first time with a battalion of National Guardsmen engaged in winter field maneuvers. Field conditions no more arduous than might be expected and the camp starts off in great style. Prexy Hall, of Arkansas Tech, a guest for lunch and later exhibits distinguished qualifications as many a urologist might envy, his anecdotes being appreciatively received.

December 18th. Early away to the scene of our city labors viewing one of nature's grandest spectacles as we traverse the mountain ridge, the city of Russellville well below completely blanketed out by a smooth layer of fog, only the tallest tree tops showing. Away to the east, the compress water towers, silvery in the dawn, appear as two sails on a fishing schooner just getting away through the sound for the day, the fog creating the illusion of a haven harbor. To the north, the fog banks and billows up against the mountains as soft white crested waves.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

The Third District Medical Auxiliary met in Stuttgart, October 26th, with the organized counties represented. Mrs. H. T. Smith, wife of the President-elect of the Arkansas Medical Society, of McGehee, was present and outlined her plans as State Chairman of Doctors' Day. Mrs. E. D. McKnight, State Chairman of Hygiea, urged the members to encourage the subscriptions to Hygiea. In reply to Mrs. Loyce Hatchcock's plea on organization, the Auxiliary decided to contact wives of doctors of remaining counties, in joining the nearest organized county or forming an auxiliary. The meeting adjourned to meet at Brinkley in the spring.

The November meeting of the Woman's Auxiliary to the Pulaski County Medical Society was held at the home of Mrs. J. Donald Hayes with Mrs. Clyde Rodgers, Mrs. Bryce Cummins, Mrs. T. D. Brown, Mrs. Don Harde-man and Mrs. R. E. McLochlin as co-hostesses. Autumn flowers and fruit were used in decoration. The luncheon was served buffet style with Mrs. S. C. Fulmer and Mrs. W. N. Freemyer at the service. There were 41 members present.

Mrs. Fulmer, program chairman, introduced Miss Erle Chambers, executive secretary of the Arkansas Tuberculosis Association, who spoke on the "Program of the Association in Arkansas."

A business session was held with Mrs. L. F. Barrier presiding.

The Woman's Auxiliary to the Miller-Bowie Counties Medical Society met at the home of Mrs. H. E. Longino. Co-hostesses were Mrs. H. E. Murry, Mrs. R. W. Pickett, Mrs. Roy Baskett, Mrs. E. L. Beck and Mrs. Perry Priest.

The house was lovely with autumn flowers and foliage. Mrs. R. C. Cross, president, conducted the business session and heard reports from various committees.

Mrs. L. H. Lanier led a discussion on the Wagner bill introduced by Senator Wagner of New York. The bill calls for \$80,000,000 to provide for general welfare by enabling the several states to make more adequate provision for public health. The plans are to cover such activities as social insurance, public assistance, workmen's compensation, vocational rehabilitation, and industrial hygiene and education.

A salad plate was served during the social hour.

Members present other than those mentioned were: Mrs. L. J. Kosminsky, Mrs. R. R. Kirkpatrick, Mrs. A. G. Lee, Mrs. T. F. Kittrell, Mrs. P. H. Phillips (Ashdown), Mrs. Wm. Hibbitts, Mrs. C. E. Kitchens, Mrs. Decker Smith and Mrs. J. Rosetti.

The Sebastian County Medical Society Auxiliary voted to contribute \$10 to the state student loan fund and to renew Hygiea subscriptions to local clubs and institutions and rural schools, Monday at the business session held in connection with a luncheon at the home of Mrs. Ruth Moss Carroll, 400 North Greenwood Avenue.

The subscriptions to Hygiea, the official publication of the medical association, go to the Girls' Club, Rosalie

Tilles Children's Association, Carnegie Library and several rural schools in the Forth Smith area. Mrs. S. J. Wolfermann, Hygiea chairman, reported on the Hygiea committee work.

Dr. Thomas P. Foltz, president of the Sebastian County Medical Society, was the program speaker. He discussed briefly the subject, "Socialized Medicine," then explained ways in which the Auxiliary may be of benefit to the society by co-operating in the care of indigent patients, particularly negroes. Mrs. I. Fulton Jones, president, presided.

Mrs. Jones and Mrs. J. S. Southard were hostesses. Others present were Mrs. Merle Woods, Huntington, who was admitted to membership, Mrs. G. G. Woods, Huntington; Mrs. B. L. Ware and Mrs. C. W. Hall, of Greenwood; Mrs. Paul McConnell, Booneville; and Mrs. Fred Krock, Mrs. Charles T. Chamberlain, Mrs. W. R. Brooksher, Jr., Mrs. H. C. Dorsey, Mrs. Wolfermann, Mrs. Ralph Weddington, Mrs. Thomas P. Foltz, and Mrs. W. F. Rose.

Mrs. W. F. Rose,
Publicity Chairman for the Auxiliary of the
Sebastian County Medical Society.

The Madison County Medical Society Auxiliary gave a noon luncheon at the City Hotel in Huntsville. Special guests were Mrs. C. E. Kitchens of DeQueen and Mrs. Alfred Hathcock, Fayetteville, president and president-elect respectively of the State Medical Society Auxiliary, and Mrs. Loyce Hathcock and Mrs. Fred Morrow of Fayetteville. Members present were: Mrs. G. D. Counts of Wesley, Mrs. N. H. Hill of Hindsville, Mrs. Carl Stewart, Mrs. Charles Beeby, Mrs. Fred Youngblood and Mrs. Harold Grever of Huntsville.

A lovely affair of early November was a luncheon given for members of the Union County Medical Auxiliary at the Garrett Hotel. Special guests for the occasion were: Mrs. C. E. Kitchens of DeQueen, state president of the Medical Auxiliary, Mrs. Pierre Redman of Mena state secretary, and several members of the Ouachita County Auxiliary.

Mrs. W. S. Riley introduced the guest speaker, Mrs. Kitchens, who discussed "Aims and Purposes of the Medical Auxiliary and Its Constructive Program for the year." Mrs. L. G. Fincher, president of the county auxiliary, presided at the luncheon.

The Southeast Arkansas Auxiliary met in Dermott, November 20th. Dinner was served to forty-six members of the Medical Society and Auxiliary, in the Methodist Church, by the Missionary Society with the doctors of Dermott as hosts.

The Auxiliary was invited to the home of Dr. and Mrs. Thompson for the business meeting. Plans were made for the Christmas party and to send boxes of fruit to the children's homes at Monticello at Christmas.

The next hour was spent in playing games, and then we left for our homes eagerly anticipating the next meeting.

The Washington County Medical Society Auxiliary held two meetings in November, with good attendance at both meetings. At the work meeting three sewing machines were used, and others sewed by hand on our supplies for the City Hospital. When this work is completed we expect to sew for the Veterans' facility here.

Signed: Mrs. R. L. Hathcock

Dear Auxiliary Members:

I know that whenever you hear my name or see me you instinctively think "Student Loan Fund." You are right again. I did want our president to get you a new chairman this year, but she didn't see fit.

Maybe this isn't the time to turn the fund over to new management and again it may be the very time to have someone with fresh enthusiasm; for you will remember that at our annual meeting last April we voted to put forth special efforts for the next few years and raise our fund to \$5,000, then rest on our laurels and see the good it does and how many worthy boys we can make happy and useful.

Our president is enlarging the committee this year and you will have a councillor in each district to advise you as the best plans for your particular section and urge you on to carry them out.

Pulaski county once raised a neat sum with a concert by the talent of the doctors and their families. Everybody plays cards. Have a White Elephant Sale—almost every one has something she doesn't care for that some one else would want. Have a big benefit dance and include the younger set; they are always glad of an excuse to dance. Give a rummage sale, if you aren't rummaged out, and help the poor as well as our cause. Have several candy sales at the school. Or, if you had rather, save your dimes for a couple of months and donate them to the fund. Or, do something else that no one else has ever done. Do whatever you can with best results in your community, but do something and not only one thing at a time, but several.

If you could talk personally with these boys you would give more, and more enthusiastically. Occasionally we have let our sympathy run away with us and have helped a rotten one, but we haven't lost anything yet and I hope we won't in the future.

We have helped 55 boys and girls so far and have applications for loans to help seniors pay tuition this fall that will nearly wipe out our cash balance, and we must have more to help others at the close of the year.

If you knew that a few have sent as much as a third of their income to repay their notes and how grateful they are, you would certainly think the effort worthwhile. This summer one boy said, "I owe several people, but these loans I am paying back first of all, for I know just what they meant to me when I was in a tight and worried crazy, and I want this money to help someone else." Another wrote: "It gives me great pleasure to be able to pay my note at this time. And I wish to thank you again for coming to my aid when I needed help so badly. I can well remember how disheartened I was and on the verge of giving up, when you arranged the note for me during the first of my junior year. I hope that you will be able to continue the helping hand for many years to come."

We know you will all put forth an extra effort this year and we are expecting it of you, and we know we won't be disappointed.

Sincerely,
MRS. CHAS. E. OATES,
Chairman Student Loan Fund Committee.

BOOK REVIEWS

Psychobiology and Psychiatry: A Textbook of Normal and Abnormal Human Behavior. By Wendell Muncie, M. D., Associate Professor of Psychiatry, Johns Hopkins University; Assistant Psychiatrist, Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital. Pp. 739. 69 illustrations. Price \$8.00. Saint Louis: C. V. Mosby Company, 1939.

This book, with a forward by Dr. Adolf Meyer, is aimed primarily for the use of students; however, as Dr. Meyer states, it is a voice from a work-shop and contains many illustrative case histories. It is to be recommended highly not only as a textbook for students, but as a reference book for the physicians library.

Diseases of the Foot: By Emil D. W. Hauser, M. S., M. D., Assistant Professor of Bone and Joint Surgery, Northwestern University Medical School; Attending Orthopedic Surgeon, Passavant Memorial Hospital, Chicago. With a Foreword by Sumner L. Koch, M. D. 472 pages with 263 illustrations on 172 figures, some in colors. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$6.00 net.

Long-neglected, the foot is coming into its own as physicians realize the importance of its disorders. In this volume the anatomy and physiology are concisely reviewed, the examination is fully presented and there is full and complete presentation of all foot disorders. This is a most helpful work, one with which every general practitioner should be well acquainted.

1939 Yearbook of Radiology: Edited by Charles A. Waters, M. D., Associate in Roentgenology, Johns Hopkins University; Assistant Visiting Roentgenologist, Johns Hopkins Hospital, Baltimore; Whitmer B. Firor, M. D., Assistant in Roentgenology, Johns Hopkins University and Johns Hopkins Hospital, Baltimore, and Ira I. Kaplan, B. Sc., M. D., Director, Division of Cancer, Department of Hospitals, City of New York. Pp. 528. 509 illustrations. Price \$4.50. Chicago: The Yearbook Publishers, 1939.

With equal emphasis on diagnosis and therapy, nearly 400 articles of the year have been carefully abstracted. Every advance in roentgenological diagnosis and therapy has been included. In this volume the radiologist has available a condensation of the year's literature, valuable for study and reference.

Synopsis of Pediatrics: By John Zahrosky, A. B., M. D., F. A. C. P., Professor of Pediatrics, Director of the Department of Pediatrics, Saint Louis University School of Medicine, and Pediatrician-in-Chief to the Saint Mary's Group of Hospitals, Saint Louis. Assisted by T. S. Zahorsky, B. S., M. D., Instructor in Pediatrics, Saint Louis University School of Medicine, and Assistant Pediatrician to the Saint Mary's Group of Hospitals, Saint Louis. 3rd edition. Pp. 430. Illustrated. Price \$4.00. Saint Louis: C. V. Mosby Company, 1939.

(Continued on Page 194)

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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This little manual on Pediatrics represents a definite need in any physician's complete library. It considers the diseases of children in the degree of their importance, or rather in their frequency of occurrence. It stresses the common things heavily and in proportion the rarer things more lightly.

One of the best features of this little book is the profusion of illustrations of various kinds. Among these are a number of colored plates which are very artistically done. Since many of us grasp a situation more clearly by means of visual images than by long, drawn-out, word pictures, these illustrations are valuable and time-saving to the busy doctor.

In short, this volume fills a definite need as a supplement to more thorough works on the diseases of children. It should be found on the desk of every pediatrician and of every physician interested in the diseases of children.

Sam Phillips, M. D.

Menstrual Disorders: By C. Frederic Fluhmann, B. A., M. D., C. M., Associate Professor of Obstetrics and Gynecology, Stanford University School of Medicine, San Francisco, California; Assistant Visiting Obstetrician and Gynecologist to Lane and Stanford University Hospitals; Fellow of the American Gynecological Society. 329 pages with 119 illustrations. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$5.00 net.

The author has endeavored "to set forth our present concepts of the physiology of the menstrual cycle in women, and the various disorders which may occur under the influence of local or systemic disease." He has well succeeded in his work. Much of the presentation is based upon an extensive personal experience. The entire field is reviewed in the consideration of the subject with emphasis being placed upon endocrine factors. This is a clear exposition of the entire matter of menstrual disorders.

A Textbook of Surgery: By American Authors. Edited by Frederick Christopher, B. S., M. D., F. A. C. S., Associate Professor of Surgery at Northwestern University Medical School; Chief Surgeon, Evanston (Illinois) Hospital. Second Edition, Revised. 1,695 pages with 1,381 illustrations on 752 figures. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$10.00 net.

This work appears in its second edition within three years which is evidence of its acceptance. In the revision, the obsolete has been discarded as the new is added. A new chapter on roentgen diagnosis and therapy has been added.

While written primarily for the student, it will be of definite value to the general surgeon. It is enjoying deserved popularity.

Cardiovascular Diseases: Their Diagnosis and Treatment: By David Scherf, M. D., and Linn J. Boyd, M. D., F. A. C. P., Associate Professor of Clinical Medicine, and Professor of Medicine, respectively, New York Medical College, Flower and Fifth Avenue Hospitals. Pp. 458. Price \$6.25. Saint Louis: C. V. Mosby Company, 1939.

Intended for the general practitioner, this book emphasizes the phases of cardiovascular disease which are of primary interest to the general physician. The practical aspects of the subject are given from the authors'

own experience and they have handled the presentation well.

Surgery of the Eye: By Meyer Wiener, M. D., Professor of Clinical Ophthalmology, Washington University School of Medicine, St. Louis, Missouri, and Bennett Y. Alvis, M. D., Assistant Professor of Clinical Ophthalmology, Washington University School of Medicine, St. Louis, Mo. 445 pages with 396 illustrations. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$8.50 net.

In the preface to this volume the authors state that it is their intention to supply a handy atlas that the practicing ophthalmologist and student of ophthalmology can quickly refer to for information on the surgical correction of ocular defects. They have wisely avoided any attempt to compile an encyclopedia of ophthalmic operations and have quite properly advocated only generally accepted procedures. The authors have had extensive experience and thus are able to cover each subject quite adequately with a few well-chosen procedures.

The illustrations deserve special comment. They have been very generous in this respect. Each detail of the operation is clearly illustrated and the illustrations are arranged to give the greatest help. Take, for example, the chapter on Operations on Muscles of the Eye, and specifically the O'Connor cinch operation,—four well-chosen illustrations with proper legend leave little to the imagination in this otherwise hard to describe procedure.

Altogether, this is a practical, well-prepared, and easy to read volume of convenient size and there is little to be said in adverse criticism. It will fill a very definite need in ophthalmic practice.

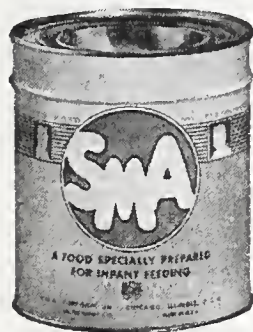
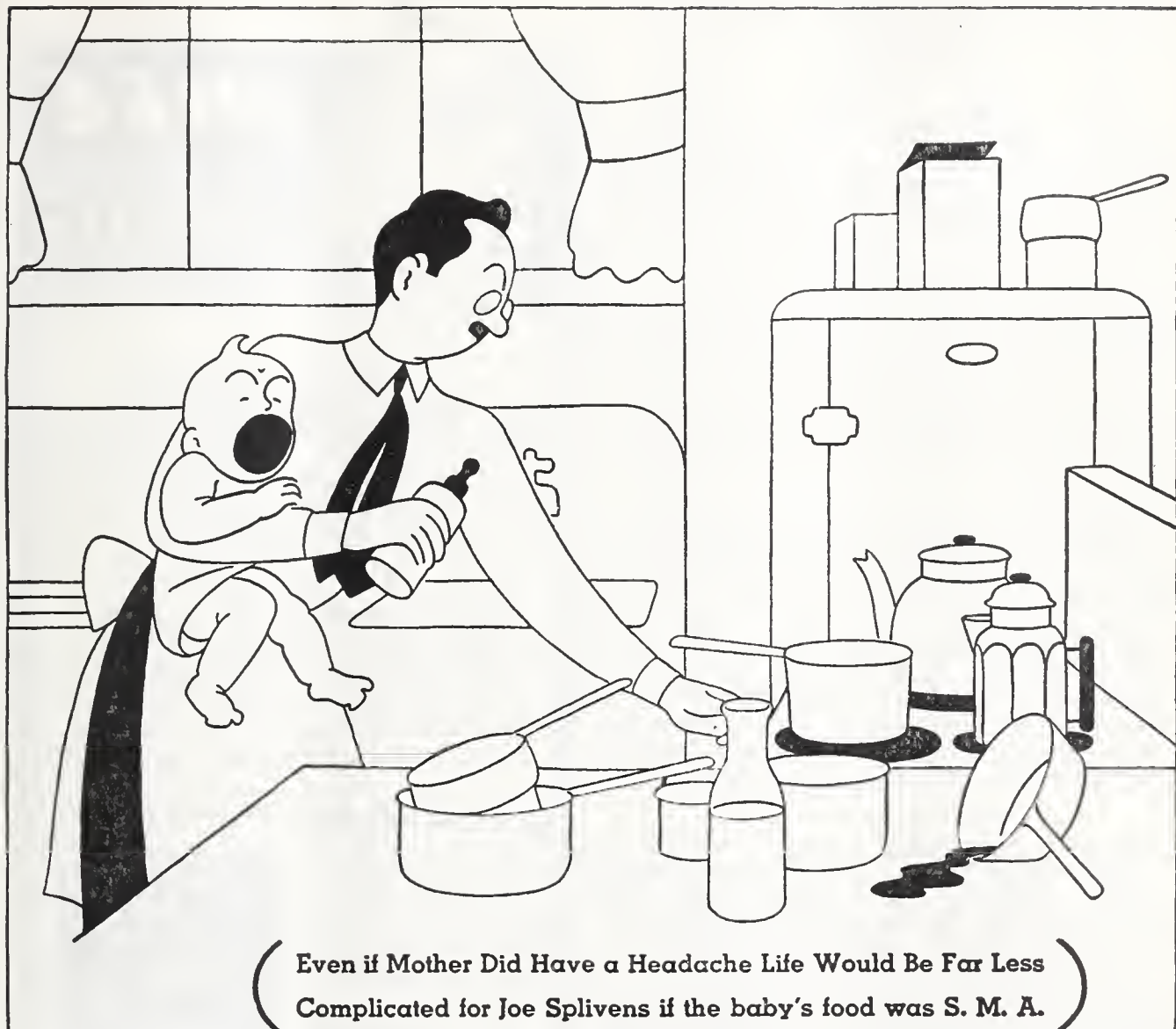
Accepted Foods, and Their Nutritional Significance: A publication of the Council on Foods of the American Medical Association. Cloth, price, \$2.00 postpaid. Pp. 512. Chicago: American Medical Association, 1939.

Accepted Foods, and Their Nutritional Significance contains descriptions and detailed information regarding the chemical composition of more than 3,800 accepted products, together with a discussion of the nutritional significance of each class of foods. The book provides also the Council's opinion on many topics in nutrition, dietetics and the proper advertising of foods.

This book will be a welcome reference book for all persons interested in securing authoritative information about foods, especially the processed and fabricated foods which are widely advertised. The accepted products are classified in various categories: fats and oils; fruit juices including tomato juice; canned and dried fruit products; grain products; preparations used in the feeding of infants; meats, fish and sea foods; milk and milk products other than butter; foods for special dietetic purposes; sugars and syrups; vegetables and mushrooms; and unclassified and miscellaneous foods, including gelatin, iodized salt, coffee, tea, chocolate, cocoa, chocolate flavored beverage bases, flavoring extracts, dessert products, baking powder, cream of tartar, baking soda, cottonseed flour. There is a suitable subject index as well as an index of all the manufacturers and distributors of food products that stand accepted by the Council on Foods.

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THE IMPORTANCE OF DIFFERENTIAL DIAGNOSIS OF LESIONS IN THE ANUS, RECTUM AND LOWER SIGMOID COLON*

RALPH E. CRIGLER, M. D.
Fort Smith

That malignancies involving the anus, rectum and lower sigmoid colon are on the increase is a debatable question. Certainly we are recognizing a greater number of conditions involving this region. The consensus of opinion is that this is due to the improvements in diagnostic technique and the more widespread use of these methods. We are more concerned, however, in stressing the importance of early differential diagnosis and the significance of precancerous lesions, for upon such does the success of not only the treatment, but the prevention of cancer as well depend.

Incidence of Cancer

In going through the recent literature one finds that an estimate of approximately 12% of all malignant tumors in the human body originate in the anus, rectum or lower sigmoid colon. Eighty per cent of all intestinal cancers are located in this region. It has been stated that cancer of the rectum and lower sigmoid is next in frequency to that of the stomach and equal to that of the uterus.

In a series of 5,714 malignant cases from the Radiological Service of the Philadelphia General Hospital, reviewed by Bacon, records show the incidence as follows:

Site of Cancer	Number of Cases
Cervix	902
Breast	686
Stomach	545
Rectum and Sigmoid Colon.....	475
Prostate	293
Larynx and Epiglottis	265
Tongue and Mouth	254

Bladder	202
Tonsil and Pharynx.....	163
Esophagus	148
Vulva and Vagina.....	110
Testis, Scrotum and Pelvis.....	105
All other sites.....	1,456

Cancer of the rectum stands fourth in this series and, as you see, stands next in frequency to that of the stomach. For some unknown reason cancer of the rectum is rare in the colored race. Men seem to be more susceptible than women. The most usual site for cancer involving the anus, rectum and sigmoid is shown by the following table compiled by Bacon:

Location	Number of	
	Cases	Percentage
Sigmoid	315	22.5
Recto-Sigmoid	231	16.5
Within 5th in above ano-rectal line	148	10.6
Within 4th in above ano-rectal line	211	15.0
Rectal		
Ampulla Within 3rd in above ano-rectal line	228	16.3
Within 2nd in above ano-rectal line	126	8.9
Within 1st in above ano-rectal line	74	5.3
Anus	68	4.9
Total.....	1,401	100.0

It so happens that the author's series, though a very small one of 12 cases, represents an unusual variety to be found in such a small number, as follows:

Location	Number of	
	Cases	Percentage
Sigmoid	4	33.33
Recto-Sigmoid	3	25.00
Within 5th in above ano-rectal line	1	8.33
Within 4th in above ano-rectal line	1	8.33
Rectal		
Ampulla Within 3rd in above ano-rectal line	1	8.33
Within 2nd in above ano-rectal line	0	0.00
Within 1st in above ano-rectal line	1	8.33
Anus	1	8.33

* Read before the Sixty-fourth Annual Session of the Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

Etiology

We have to frankly admit that the actual cause of cancer is yet unknown. Many theories have been propounded to explain the etiology. Most important, and still accepted today, is Virchow's irritation theory. Given such a theory, and if it is the accepted theory today, we certainly have cause to believe that with the multitude of rectal diseases, cancer should be comparatively frequent in the anus, rectum and lower sigmoid. It must be admitted that irritation does play a very important role even though it does not explain the manner in which normal cells are converted into malignant cells or the formation of tumor tissue.

Differential Diagnosis

By careful and thorough examination we can definitely identify many precancerous lesions in the anus, rectum and lower sigmoid colon. As we all know, rectal polypi and adenomata have heretofore been classified among the benign group. These tumors are no longer considered such but definitely classified in a group of their own, precancerous tumors. It is further agreed by leading authorities that any form of chronic irritation in or about the rectum, or elsewhere for that matter, may be followed by malignant degeneration.

If we could only see all the rectal cancer cases a few years or even a few months before the appearance of the malignant growth, and remove all existing pathology, I believe we could reduce the incidence of cancer in this region to a very small percentage. A patient with cancer in this region will elicit symptoms referable to these organs, having existed for quite some time. Recalling to your minds some of your former rectal cancer cases; how many of them did not give a history of constipation, low tired back ache, pruritis ani, diarrhea, pus, blood, hemorrhoids, fistula, etc.? Chronic irritation may exist for many years manifested by colitis, proctitis, hemorrhoids, fistula, leukoplakia, cryptitis (so often passed off by just insignificant skin tags), polypi, papillitis, etc.

It is true, there are many lesions in the recto-sigmoid region that, to an experienced eye, the appearance offers a definite diagnostic suggestion. However, there are many benign bleeding adenomata that so closely resemble a malignant adeno-carcinoma that we have only one alternative for the correct answer; that is a biopsy, or repeated biopsies. The answer, incidentally, will be the deciding factor between a simple or a radical operation. Cancer, sarcoma, benign

adenomata, gummata, thrombosed ulcerated internal hemorrhoids, inflammatory stricture, tuberculoma and diverticulitis (though rare in the rectum), may mimic the picture of malignant neoplasms and must by all means be differentiated.

If we sigmoidoscope all our patients, get a routine Wassermann and Kahn and take biopsies we should never miss a diagnosis.

Metastases

To further illustrate the importance of differential diagnosis in the anus, rectum and lower sigmoid it might be of interest to glance at the following series of necropsies upon patients with cancer of the anus, rectum or lower sigmoid, and to note the most common sites of extension and metastasis.

Liver	109	Diaphragm	3
Peritoneum	52	Lumbar Vertebrae	3
Lungs	37	Dorsal Vertebrae	3
Bladder	19	Broad Ligament	2
Sacrum	19	Heart (epicardium)	2
Coccyx	11	Thyroid	2
Uterus	11	Femur	2
Pancreas	7	Ribs	2
Kidney Capsule	7	Skull	2
Spleen	6	Buttocks	2
Prostate	6	Breast	2
Vagina	6	Cervical vertebrae	1
Inguinal glands	5	Shoulder girdle	1
Adrenal glands	5	Brain	1
Pelvis	4	Testicle	1
Perineum	3	Vulva	1
Ovaries	3	Mediastinum	1

The above represents a series of 250 cases reported by Bacon.

Regional lymph nodes	336	Brain	9
Distant nodes	60	Thyroid	8
Liver	245	Spleen	6
Lungs	94	Skin	6
Peritoneum	52	Heart	5
Pancreas	16	Pericardium	4
Bones	15	Bladder	3
Adrenal gland	13	Uterus	2
Kidney	13	Breast	2
Ovary	13	Thoracic duct	2
Intestine	13	Muscles	1
Mesentery	10	Scrotum	1
Stomach	10	Vagina	1

The above represents a series of 1,112 necropsies reported by Buday-Riechelman and others.

Prognosis

The prognosis of cancer in the anus, rectum or lower sigmoid is determined by three chief factors: age, duration of symptoms and location. The younger the patient the higher the mortality. Cancer occurring before the age of 35 is rarely curable. The longer the duration of symptoms the more chance of extension and metastases. The mortality increases from below upward.

CASE REPORTS

(1) Female, age 60. Hemorrhoids 15 years, operated 10 years ago, five years later had complete recurrence—operated again and was told she had a tumor which was removed. She later went to some place in Missouri and then to Kansas City, then back to former doctor who operated on her again as condition had recurred. Three to four weeks later she was conscious of another recurrence with bleeding. At the time of my first examination, 1-18-'39, there was a complete prolapse of a large cauliflower-like mass, very red and bleeding. Biopsy taken, benign adenoma. At the recto-sigmoid junction a similar mass was encountered and bleeding. Biopsy again revealed benign adenoma. Wassermann and Kahn were four plus and spinal fluid showed a colloidal gold curve of meningo-vascular syphilis. Patient put on heavy, continuous anti-luetic treatment, polyps removed by electrocoagulation. Following removal by electrocoagulation patient had repeated massive hemorrhages. Due to fact that these polyps were so vascular and so situated a suture was almost impossible. In order to complete removal of all polyps, due to their extensiveness, it required several operations by electrocoagulation and each time there was a massive hemorrhage. Patient is continuing her anti-luetic treatment and when last seen there were no recurrences and she had gained 18 pounds in weight.

(2) Male, age 54. General health always good. About one year previous to examination, bloody mucous stools were first noted and have so continued present. At time of examination was having three to five stools daily and preceding each movement he experienced pain in lower left abdomen and in rectum, also recent history of aching sensations in both hips and down thighs. Pain alone brings him to the doctor. Examination revealed a diffuse cauliflower-like mass in lower sigmoid. Biopsy taken, adeno-carcinoma. Patient operated but only a colostomy was done as metastatic nodules were encountered all along the aortic chain and nodules in the liver.

(3) Male, age 35. Hemorrhoids ten years, treated self with ointments. Severe hemorrhages past two or three weeks daily. Examination revealed a large adenomatous-like mass, elongated 4-5 cm. and 2-3 cm. in diameter within the third inch above ano-rectal line. Advised to have immediate hospitalization but refused treatment. Biopsy taken—adeno-carcinoma. Patient expired three weeks later from massive hemorrhage that practically filled entire colon.

(4) Female, age 47. Hemorrhoids for 20 years. Hard painful prolapsed mass for past two or three years, bleeding frequent, loss of 25 pounds weight in past six months, complained also of fatigue and anorexia. Mass had eroded through recto-vaginal septum and into bladder. Biopsy taken, adeno-carcinoma. Mass removed by diathermy cautery to relieve obstructive symptoms. Patient still living eight months later. Inoperable.

(5) Male, age 33. Hemorrhoids ten years; recently noticed frequent severe hemorrhages, itching, purulent discharge and prolapsed hemorrhoids. Examination revealed severe cryptitis, papillitis, fistula in ano, numerous internal hemorrhoids and a small tumor about the size of a quail egg posterior just at pectinate line. Attempts to take biopsy revealed an infected cystic tumor filled with hair, a long strand of which extended back to tip of coccyx. Entire tract excised. Uneventful recovery.

(6) Female, age 31. History essentially negative prior to fall of 1937. In November, 1937, patient developed a fistula in ano and a few small prolapsed hemorrhoids. She was operated for this fistula and hemorrhoids by general practitioner. Healing was very slow, infection became extensive. A huge channel extending about two inches past the anal verge and up into the rectum about one-half inch past the pectinate line sloughed out. This resulted in extensive scar tissue formation, spread upward about two inches into the rectum leaving a partial stricture. Every since that time patient has noticed fecal incontinence, a purulent discharge with bleeding. Examination October 13, 1938, revealed the above with hyperplastic adenoid-like tissue scattered about the upper scar tissue ring. Wassermann and Kahn were both four plus. Patient was placed upon extensive anti-luetic treatment, local treatment to rectum and sulfanilimide in heavy doses, the latter being chiefly for the purulent infection. Two months later patient noticed that she no longer was incontinent, there was no pus and examination revealed that the adenoid-like tissue had not recurred after removal of same with cautery two months previous.

(7) Male, age 52. Severe hemorrhoids for 20 years with frequent hemorrhage, cryptitis, chronic fissure and spastic anal canal. With much difficulty sigmoidoscopic examination was done and revealed a tumor 2-3 cm. in diameter and about 2.5 cm. long at the recto-sigmoid junction. Biopsy revealed adeno-carcinoma. Patient refused operation. Expired less than one year later.

(8) Male, age 60. Severe hemorrhoidal condition for ten or twelve years with occasional bleeding and pruritis ani. Hemorrhoids finally protruded and patient could not reduce them. Examination revealed, through the sigmoidoscope, a diffuse hyperplasia with tumor formation 2-3 inches in length, involving entire circumference of wall, proximal to recto-sigmoid junction. Metastasis too far advanced for surgery. Biopsy revealed adeno-carcinoma. Patient expired five months later.

(9) Male, age 61. History essentially negative, aside from pruritis ani for several years, until three months prior to examination, at which time patient began to lose weight, experienced fatigability, anorexia, etc. Examination revealed a few small internal hemorrhoids and marked cryptitis. In lower sigmoid was a saucer-like tumor involving entire lumen. Biopsy, sarcoma. Patient expired in three months.

(10) Female, age 59. Negative history, aside from constipation of long duration, until two to three weeks prior to examination at which time she noticed moderate hemorrhage following each bowel movement, which gradually increased in amount. Sigmoidoscopic examination revealed bleeding mass in lower sigmoid. Patient refused operation; hospitalized and radium and X-ray applied. Patient expired in seven weeks.

(11) Male, age 65. General health always good until six months previous to examination at which time he noticed slight rectal protrusion with bleeding following bowel movement. Sigmoidoscopic revealed a huge adenoma which completely filled lower sigmoid. Biopsy, adeno-carcinoma. Patient refused operation. Expired six months later.

(12) Female, age 40. General health always good aside from five pregnancies, all full term normal deliv-

eries. Seldom constipated. Bowel movements regular but during past three weeks often specked with blood. Sigmoidoscopic revealed cancer large as average lemon at recto-sigmoid junction. Biopsy, adeno-carcinoma. Patient operated, extensive metastasis found along aortic chain and in liver. Patient expired one month later.

(13) Female, age 54. Hemorrhoids three or four years, intermittent hemorrhages during past six months. No weight loss, appetite good. No other symptoms aside from constipation which is relieved by milk of magnesia daily. Sigmoidoscopic revealed a cauliflower-like mass 3-4 cm. in diameter at recto-sigmoid junction. Patient refused operation. Biopsy, adeno-carcinoma. Patient at present is in charity hospital.

(14) Female, age 55. Severe constipation twenty-five years, intermittent bleeding four to five years, left lower quadrant soreness twelve years, which has increased in severity during the past two to three years during which time she has also passed small blood clots frequently. About once every four or five days, for the past two or three years, she has noticed tomato juice-like colored mucous and recently bright red blood. Left lower quadrant soreness seems to have disappeared and localized in rectum giving her a sensation of fullness and pressure. Pain (a late symptom of malignancy), brings patient to doctor. Examination reveals prolapsed internal hemorrhoids, quite extensive. At a level within the fourth inch above the ano-rectal line was found a diffuse hard cauliflower friable mass, which had infiltrated through the rectal wall and bled freely upon manipulation. Biopsy revealed adeno-carcinoma. Patient was operated early part of April, 1939, at which time metastatic nodules were found extending along the aortic chain and a hard nodule was found in the liver about the size of a half dollar. Colostomy was done for relief of symptoms and to date patient's course has been uneventful.

(15) Male, 54 years old. History of hemorrhoids twenty-five years, had had three hemorrhoidectomies. Last operation was about four or five years previous. Condition had recurred with pain during the past two or three years. Frequent bleeding, severe constipation and itching, unable to get bowels to move except in liquid form. Examination, 1-15-'38, revealed a hard infiltrated friable nodule which involved the entire anal canal with much scar tissue and stricture formation. Unable to enter rectum as opening was no larger than that of a lead pencil. Biopsy taken which revealed adeno-carcinoma. Hospitalization advised, patient refused treatment.

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SOME PROBLEMS IN RECTAL DIAGNOSIS*

H. E. MURRY, M. D.

Texarkana

The patient who complains of back troubles, leg and perineal discomfort should have a careful inspection of the anus and rectum, as well as in all forms of indigestion. It will surprise you the frequency in which pathology will be found and, when corrected, the great improvement in symptoms.

The method of making the examination is important. For unless this is done properly much information may be overlooked. The average patient fears the examination and ordinarily postpones it until alarmed by some alarming sign. Actually the rectal examiner's task is far more pleasant than the dentist's, generally speaking.

It should be remembered the painlessness of early carcinoma of the rectum and the possible significance of the passage of blood during or after defecation. Early discovery is the patient's only chance.

Any patient complaining of bowel disturbance should submit to a carefully taken history, stool study, proctoscopic, and perhaps roentgenographic examination.

To prepare the patient for proctoscopic study it is no longer necessary to give enemas, and omit supper or breakfast. It is only necessary to have the part to be examined clear, for too much washing may change the pathologic signs. No preparation is preferable to the overdone.

Practically all studies may be made in the average office. The sensitive, frightened or severely ill patients are the types to be discussed here, for they are the problems. Aside from the case where rectal pain is too great from pathology, or patient is too nervous, no local or regional anaesthesia is required. Naturally you will have an occasional case where some form of anaesthesia will be desirable. Too often your case comes to you having passed through many hands and been subjected to **overtreatment with mistreatment**. First, I would say in making ready to proctoscope a patient, cover the instruments from his view, for there is nothing about a proctoscope, its size and length, to dispel his alarm. His confidence and relaxed attitude will aid you much.

* Read before the Sixty-fourth Annual Session of the Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

There are four positions usually employed, namely, the right or left "Sims," the knee-chest, the knee-elbow and the lithotomy, or inverted, positions. For the very ill or extremely nervous the Sims has advantages though the exposure is not so good.

The knee-chest is the best and can be employed in any office. I use knee-chest, unless contraindicated, for general studies, and the inverted for examination of higher structures.

I quote Dr. Granville Hanes, the originator, who explains how he first discovered the advantages of the inverted position. "As I gently inserted my well lubricated finger into the patient's anus, he let out a yell and gave one leap, when he landed his hands were on the floor, his body was in a vertical position, his lower extremities rested on the top of the table, and his anus was exposed in a most desirable manner for the continuance of the examination. I prevailed upon him to remain so until I could apply a little 10% cocaine locally, and was then able to complete the most satisfactory proctoscopy I had ever performed up until that time." You are all doubtless familiar with the Hanes table. The examination is begun by inspecting the anal margins and perineal tissues as well as that part which can be exposed by gently, but forcefully, separating the buttocks. Occasionally the anus opens widely on retraction of the margins, and a light may be passed through the anus and these parts inspected. Patulence of the anus has been considered as probably syphilis of the central nervous system, but this is by no means infallible. Fissures, fistulae, lesions, external haemorrhoids or other abnormalities are exposed, if present, on this examination.

The first and best instrument continues to be a well lubricated finger. I use this to explore size and sensitivity, preparatory to selecting the proper instrument, also, much can be learned from this procedure as to external and internal pathologic signs.

In arranging your nervous subject for study in, say the knee-chest or inverted position, you will find advantage in your procedure if you use a sort of "soothing," "cooing" line of talk like you would apply in attempting to bridle a fractious horse.

The anoscope, a short tube with a slanting end suitable in size, is preferred. There are several makes, but the Hirshman is my choice. You must view all surfaces and carefully inspect all points from as high as the tube will reach, gradually withdrawing, to view the points at the

muco-dermal margin. The anoscope, with patient in position of choice, is well lubricated with surgical jelly, placed gently to the parts, then on with in and out dilating movement allowing a few moments for dilatation of sphincter, the instrument will usually slip in without pain or alarm to the patient. It is well for the examining physician to have had at some time in his life an examination of his anus or prostate, and with this in mind, I am sure that he will understand the advisability of gentleness. The introduction procedure should apply to all rectal examining instruments. However, a point which is worth stressing, is to remove the obturator after the end is well past the internal sphincter, and with a good clear light follow the channel of the bowel. Use no blind force for severe damage may result. The canal will vary with nearly every patient. The direct light is preferable, but one should use the same type at all times to become accustomed to its illumination of the objects to be studied.

The proctoscope or other instrument is usually passed to its farthest examining point. You then view and describe to a nurse-secretary the normal or abnormal structures observed as it is gradually withdrawn. It is important to make written notes which will be very helpful in further study of a case. Too, each study improves one's proficiency.

The very common diseases of the anus and rectum are cryptitis, papillitis and muscular spasm. The structure and position of anal crypts and papillae make them peculiarly susceptible to trauma with subsequent attack by micro-organisms. Added to their normal susceptibility, insults of modern life, cathartics, food fads, and constipation, all contribute to the susceptibility of these reasonably enduring structures. There is bowel-conscious individual who makes a ritual of going to stool and remaining until results are obtained. He strains until the haemorrhoidal veins become dilated, thrombosed or ruptured, with resultant bleeding. Again the individual, who after much effort passes a large hard mass which stretches the tissues beyond endurance, leaving abraded mucosa, bruised or torn crypts, papillae and perhaps, sphincter muscle. Fissures result at times which are very painful and tax your ingenuity to heal. Doubtless the ano-rectal fistula, when not tubercular, originates with this type of bowel damage.

It is not within the province of this paper to take up treatment of disease—but to prevent and relieve ordinary constipation. All that

should be necessary are a plain well balanced diet, moderate exercises calculated to facilitate bowel movement and large amounts of fluids. Constipation with pathology must be studied carefully and managed from this standpoint. The frequency with which we see haemorrhoids at the present time perhaps results from radio prescribed laxation. It is questionable when, if ever, the radio advertiser will be regulated to the actual welfare of the listening public, rather than by the record of sales of their nostrums.

A complication less often seen, and a further continuation of the above abnormalities, is rectal prolapse. This condition may be very simply dealt with, and relieved, especially in the young, but may prove quite difficult and only relieved by radical procedure in the older patients. The very old present the condition most frequently and due to their debility have many added risks for surgery.

A condition which you should always keep before you in ano-rectal study is tuberculosis. Especially is this so if your patient is cachectic or has a suspicious chest history. Anal tuberculosis appears as multiple ulcers practically always with much moisture. This is not to be confused with colonic mucus. The lesions are usually numerous and may occur in such confluent areas of dissolution that they involve the entire anus and portions of the perineal tissues. The margins of the ulcers are clear cut and the bases appear greyish, granular and may present occasional tubercles. The surrounding tissue is indurated and gives a parchment-like feel to the finger. A peculiar characteristic is the surprising lack of pain.

Amoebic ulcerations have their own characteristics. The earliest stage shows a small rounded "nidus" within the mucosal surface and in its center is a yellowish spot created by beginning necrotic changes. The ulcers may become quite large and give the appearance of malignancy. Every lesion examined should have a carefully-taken specimen study so that a mistaken diagnosis of malignancy will be avoided. This has been done with unnecessary surgery.

The diagnosis of amoebiasis of the rectum presents little difficulty if carefully studied. However, bacillary dysentery, balantidiasis and actinomycosis offer somewhat more difficulty. In bacillary dysentery there is no point on the mucosal wall free from evidence of inflammation. Hyperemia, together with spotted haemorrhagic areas and edema of the mucus membrane, are noted. Ulcers soon appear in this membrane

and they are characterized by margins which are adherent and leveled down to an angry red base. Acute balantidium coli is prompt and fatal in its course, death resulting usually under ten days. The parasite is the largest living protozoa in the intestine of man. Actinomycosis rarely occurs in the rectum and anus. Is usually diagnosed from diopsy removed from a granulating sore.

Chronic ulcerative colitis, diverticulosis, poly-poid disease are here mentioned, but their diagnosis being usually made by finding the distinct polyp or by X-ray.

Malignant disease of the rectum and anus being so serious and the only hope of saving life being its discovery in the very early stage, it behooves the examiner to suspect and eliminate this possibility in every case. All lesions in these parts should be inspected with this possibility in mind, particularly when the age of the patient advances past fifty years. The responsibility rests with the physician in whose hands the patient places his well being. In 87 per cent of patients with malignancy, blood passages were noticed. In 66 per cent pain was complained of in varying parts of the hips, sacral and perineal regions. Any blood signs reported by your patient should instantly alarm you with its possibility. Malignant lesions appear in about the following percentages: 93 per cent in the rectum, recto-sigmoid, or sigmoid, only 7 per cent in the anus.

I have touched only upon the diagnosis of the more troublesome and common ailments of these parts. But there are other diseases which I feel are worthwhile mentioning, although they do not specifically limit themselves to this area. Pruritis, a disease which has resisted treatment in the past, now responds to X-ray or endocrine therapy most encouragingly. Gonorrhoea, syphilis, chancroid and granuloma are not infrequently seen and require general as well as local treatment.

COMING MEDICAL MEETINGS

Mid-South Postgraduate Medical Assembly, Memphis, February 13-16, 1940.

The New Orleans Graduate Medical Assembly, New Orleans, February 26th-29th.

Arkansas Medical Society, Fort Smith, April 15-17th, 1940.

American Medical Association, New York, June 10-14th, 1940.

Region II, American Academy of Pediatrics, Edgewater Park, Mississippi, March 15-16, 1940.

ADENOMA OF THE RECTOSIGMOID AND ITS RELATIONSHIP TO CARCINOMA OF THE RECTUM*

H. G. HUMMEL, M. D.
Little Rock

Examination of the rectum and sigmoid by modern methods of inspection through electrically lighted proctoscopes has greatly enhanced our knowledge of the pathology of the terminal bowel. This applies particularly to ulcerations and neoplasms of the rectosigmoid. Benign tumors of this region, as a rule, are encapsulated, and show, microscopically, an orderly arrangement of normal cells, such as the lipoma, fibroma, myoma or myxoma. They have no tendency to invade the basement membrane or adjacent structures.

This is not the case with the adenoma, or rectal polyp. The later designation, of course, refers only to the morphology of the tumor. Adenomata are more common than any other type of intestinal growth, and are, at the same time, of greater importance from the standpoint of prognosis because of their tendency to become malignant, if not removed. An adenoma may be defined as a benign, circumscribed epithelial tumor, resembling a secretory gland in structure and supported by a connective tissue stroma.

Rankin, Buie and Barger¹ report 246 benign tumors of the large intestine, 204 of which were adenomata. One hundred fifty-six of these were in the rectum and 48 were in the colon. Structurally, they resemble mucous membrane. Grossly, they are either sessile, semi-sessile or pedunculated. They may vary in size from a pea to a walnut and appear through the proctoscope as smooth and shiny or rough and wart or cauliflower-like growths, their color varying from a pale pink to a dark red. In some instances they may grow to be large enough to nearly obstruct the lumen of the bowel. The length of the pedicle varies with the size and duration of the tumor. From the drag of its weight and increased peristalsis of the bowel in an effort to rid itself of the growth, the pedicle of the tumor may become attenuated to the point of automatic amputation, spontaneous cure resulting. These tumors usually are solitary, but may be multiple.

Adenomata occur in children as well as in adults, though Klemperer² has shown that the

incidence of polyps is greater with each successive decade of life; i.e., that there are more adenomata encountered in the fifth than in the fourth and more in sixth than in the fifth decade. The etiology of adenoma is unknown.

The symptomatology of adenoma of the rectosigmoid is variable. They are usually symptomless until they bleed. Bleeding is the common symptom which brings the patient to the doctor and a thorough proctoscopic examination, therefore, is positively indicated. In fact, the majority of adenomata are discovered accidentally during proctoscopy. Constipation and straining at stool, discharge of a moderate amount of mucus during defecation, rectal bleeding, scanty, as a rule, and a sense of weight in the pelvis may be the symptoms complained of. Occasionally, in pedunculated adenomata, especially in children, extrusion through the anus occurs which may be mistaken for internal prolapsing hemorrhoids. At times, the first intimation of a rectal adenoma which a patient may experience is a sudden hemorrhage following the intermittent passage of muco-sanguinous stools for some time previously. Adenomata, having long pedicles, may cause invagination of the bowel as a result of the downward pull of the fecal current. They have been known to produce intussusception.

The diagnosis of adenoma of the rectosigmoid is as important as the diagnosis of malignancy of the terminal bowel for it has been repeatedly demonstrated by competent observers that a large percentage of these tumors (40 to 60 per cent, if not removed) become malignant. Therefore, they should be considered as precursors of malignancy and their early and complete eradication is indicated.

There is no criterion of distinction between adenoma benignum or malignum, and the only way to determine the site and degree of malignant change, if any, in these tumors is by painstaking microscopic examination. Rankin, Barger and Buie¹ emphasize that benign adenomatous tissue may appear in many sections, only to find malignant cells breaking through the basement membrane on subsequent serial sections of the same tumor. Therefore, to protect the patient all adenomata should be considered potentially malignant and removed.

An outstanding contribution on this subject has been made by H. Westhues³ who has painstakingly examined a large number of clinical cases at the university clinics of Frankfurt and Erlangen. Westhues' classification of rectal ade-

* Read before the Sixty-fourth Annual Session of the Arkansas Medical Society, Hot Springs National Park, May 9, 1939.

nomata is based on anatomic and histologic grounds, and he has divided them into three groups.

Group 1 are the purely benign tumors, characterized by long narrow pedicles and reaching the size of a cherry or walnut. He finds no demonstrable relationship between group 1 polyps and carcinoma.

To group 2 belong the extremely large growths from walnut to apple size. A large number of this group come to malignant termination, particularly the larger and older adenomata. In this group Westhues finds a pronounced active cell proliferation, usually seen at the neck of the pedicle and head of the polyp. These cells early exhibit malignant characteristics. He emphasizes that in this group the less developed the pedicles, the more apt they are to be malignant. Presumably, in these large tumors with tenuous pedicles, the diminished blood supply interferes with cell proliferation and eventually may lead to spontaneous amputation.

Group 3 includes those polyps which, as a rule, have short thick pedicles, or none at all. They are semisessile or sessile, often appearing through the proctoscope as a button or knob on the bowel wall. Histologically, there is no basic difference between polyps of group 2 and 3, except that in group 3 the proliferation of cells is most marked at the neck of the pedicle and less marked at the head of the growth. Many adenomata of group 3 are not larger than a pea, and yet show an early carcinomatous tendency. They grow more in depth and towards the periphery, exhibiting an early tendency toward infiltration.

The work of Westhues has been confirmed by V. Schmieden.⁴ This grouping, as advocated by these two German investigators on a clinicopathological basis, is largely a matter of personal equation and is somewhat academic. Klemperer² in this country, agrees in principle with Westhues' classification, but is of the opinion that many adenomata of the rectosigmoid show such great variation in size, shape of the glands, straining and arrangements of cells that they cannot be properly classified. The best rule, therefore, is to regard them as malignant or as precursors of malignancy, and to remove them as early as possible.

The removed tumor should constitute the biopsy. If the adenoma is small, biopsy may be difficult and of little value and great care should be exercised not to traumatize the bowel wall. Sections should be made from several

parts of the growth including its pedicle. Gorsch^{5,6} emphasizes that a malignant degeneration is inevitable in the majority of adenomata and that it is impossible to state microscopically whether or not these tumors are still benign or how long they will so remain.

Diagnosis may be made by digital examination, usually by proctosigmoidoscopy and sometimes by roentgen visualization. As the most common location of adenoma is in the lower four inches of the rectum, the examining finger may detect the smooth or rough wart-like growth, or the stem of the pedicle, if such is present. Quite often, however, digital examination is negative when the tumor is small and sessilated, or, when situated higher up in the ampulla or sigmoid. Inspection through an electrically lighted proctoscope then will visualize the tumor. Not infrequently, only a solitary adenoma may be seen during the introduction of the endoscope, but on slowly withdrawing the instrument, when the wall of the bowel collapses in front of the proctoscope, two or more adenomata may be detected, previously obscured by the instrument or hidden in a fold of the mucosa. Roentgen examination of the colon by barium enema, followed by the air contrast technique may be required to demonstrate adenomata at higher levels.

One must differentiate the solitary adenoma from other tumor like conditions occurring in the terminal bowel. Hypertrophic anal papillae are sometimes mistaken by the occasional proctoscopist for adenomata. But, as anal papillae arise from the dentate line, and have a triangular base, their true nature should readily be recognized. Villous adenomata, in reality, are true papillomata and, scarcely ever, are seen by the proctologist. They hardly could be confused with the adenomata and very rarely become malignant. They are, according to Yeomans⁷ an exceedingly rare intestinal growth. Multiple polyposis, also called disseminated polyposis or adenomatosis coli, occurs both as a familial and as an acquired or postinflammatory type. In the familial type similar conditions may be found in other members of the family. These polypi involve, as a rule, the entire colon from the anus to the cecum. Sigmoidoscopy reveals that the entire bowel is studded with multiple small or large pedunculated tumors, varying in size from a small pea to a grape or walnut. X-ray examination with the air contrast technique will demonstrate the involvement of the entire colon. The weight of opinion seems to be that the

familial type of multiple polyposis eventually will undergo malignant degeneration.

The second type of multiple or disseminated polyposis of the colon has been named by Erdman and Morris⁸ acquired polyposis of the colon and by Wesson and Barger⁹, postinflammatory polyposis. All these investigators agree that these acquired or postinflammatory polypi are not true adenomata, but must be considered as pseudopolyp formations which histologically prove to be a diffuse hypertrophy of the epithelial lining. Acquired pseudopolyposis or polypoidosis would be the better names for this condition, since it develops on a chronic inflammatory basis, such as chronic ulcerative colitis, chronic amebic and bacillary dysentery.

The treatment of adenoma demands studious observation through the sigmoidoscope, since a decision must be reached as to the best procedure for complete eradication, either by the electric snare, the actual cautery or ligature. Tumors near the dentate line lend themselves readily to radical removal by electrocoagulation or electrodesiccation. Any of these electrosurgical modalities will cure, I use this term advisedly, many of these patients, and this procedure constitutes real cancer prophylaxis. A suction-apparatus connected to a suction electrode handle, as devised by Gorsch¹⁰ is almost indispensable, since a clear vision during coagulation of the base of the tumor into the submucosa is absolutely essential. Larger adenomata are best removed with the electric snare, the cutting current transecting the polyp at a safe distance from the mucosal surface. These patients should be proctoscoped at regular intervals for several years. Patients with multiple polyposis can be cured only by colectomy.

Some abbreviated case histories may give an idea of the clinical picture of adenoma of the rectosigmoid.

Case 1. Miss L. B., aged 17, had been treated elsewhere for colitis and complained of fatigue, occasional diarrhea, alternating with constipation, and passage of mucus frequently mixed with a small amount of blood. Sigmoidoscopic examination revealed the ampulla packed with fecal matter which was covered with glary mucus and streaked with blood. No amebae were found. The patient was re-examined two days later after a saline enema. Two adenomata were found; one, sessile, four inches from the anal verge on the posterior wall of the bowel, the size of a pea, and the other, pedunculated on the lateral wall of the ampulla, the size of a small walnut. The small growth was destroyed by electrocoagulation while the larger adenoma was removed with the electric snare for biopsy. The base of each growth was treated with circumvallation with prompt disappearance of symptoms.

Case 2. J. F. H., 40 years old, complained of constipation of several years duration which he controlled by large doses of bile salts, of a feeling of discomfort in his perineum, a raw feeling in his rectum, and pruritis ani. There was no bleeding or any discharge of mucus. Proctosigmoidoscopy revealed three internal hemorrhoids, a hypertrophic papilla, overhanging an infected crypt and two sessile adenomata in the rectal ampulla. The patient has refused surgical treatment.

Case 3. Miss W. L., 44 years old, consulted me on November 28, 1938, giving a history of marked fatigue, constipation, alternating with diarrhea and fleeting pain in her left lower quadrant. On rectoscopic examination hyperemia of the mucosa of the rectosigmoid and several small irregular ulcers were seen. Scrapings from these ulcers showed many motile amebae microscopically. Amebicidal therapy relieved the fatigue and evanescent pains in the left lower quadrant and arrested the diarrhea. Four weeks later she complained of slight rectal bleeding. She was again sigmoidoscoped and a pedunculated adenoma, the size of a raspberry, was discovered on the posterior rectal wall, four inches from the anal verge which previously had been overlooked. It was removed with the electric snare. Microscopic examination of the adenoma by Dr. Kilbury showed no signs of malignancy.

Summary and Conclusions

Adenoma is the most frequent neoplasm occurring in the terminal bowel.

Digital examination, sigmoidoscopy and X-ray examination by barium enema are indicated in every patient complaining of rectal bleeding, discharge of mucus, constipation or diarrhea.

Many of them are discovered by routine proctoscopic examination because they are symptomless. This emphasizes the value of proctosigmoidoscopy in all patients complaining of gastrointestinal symptoms.

Any growth, however small and innocent in appearance, should be destroyed by desiccation, electrocoagulation, or removed with the electric snare.

The consensus of opinion is that adenomata are potentially malignant and extirpation by electrosurgical methods usually precludes carcinomatous degeneration.

Multiple polyposis of the familial or pseudopolyposis of the acquired type require radical resection of the colon.

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COMMENTS ON SOME MAJOR COMMUNICABLE DISEASES REPORTED IN ARKANSAS FOR 1939

ARKANSAS STATE BOARD OF HEALTH

Diphtheria. The total number of cases of this disease reported for 1939 to the State Board of Health was 589, which was 122 less cases than the 711 reported during 1938. The five-year average of reported cases, 1934-38, was 512. Although a decrease was noted in the number of cases for the year as compared to the previous year, the total number was 77 more than the five-year average, indicating that there must be no relaxing of the campaign being waged to prevent this serious disease of early childhood. For the United States as a whole there were 24,061 cases of diphtheria reported during 1939, as compared with 29,926 in 1938.

Measles. Only 1,762 cases of measles were reported for the year 1939 as compared with 6,927 cases reported in 1938. An epidemic of this disease was experienced in the early months of 1938, whereas, in 1939, only sporadic cases occurred. It is highly probable that measles will be epidemic in the winter 1940-41. The 1934-38 five-year average of cases reported of this disease is 2,867. For the United States as a whole there were 374,841 cases of measles reported during 1939, as compared with 799,212 for 1938.

Meningococcus Meningitis. A continued low prevalence of this disease was experienced in 1939 as in 1938, the figures being respectively 30 and 31 cases, whereas, the 1934-38 average of cases reported is 50. For the United States as a whole 1,962 cases of meningitis were reported in 1939 compared to 2,824 in 1938.

Poliomyelitis. Infantile paralysis. There were fifteen more cases of the disease reported in 1939 than in 1938. The figures are 49 and 34 respectively for the two years. The 1934-38 average is 95, which indicates a relatively low prevalence of this disease during 1939. The increase in cases reported is less than the figures for the United States where 7,298 cases were reported in 1939 as compared with 1,710 cases reported in 1938.

Scarlet Fever. 534 cases of scarlet fever were reported in 1939 as compared with 559 cases in 1938, a decrease of 25 reported cases. The five-year average of this disease is 474 cases, indicating an increase of 60 cases in 1939 above the 1934-38 average. For the United States 162,033 cases of scarlet fever were reported in 1939, compared with 186,532 cases in 1938.

Typhoid Fever. The reporting of this disease indicated a decreased prevalence for the second consecutive year. 501 cases were reported during 1939, 575 during 1938, and 645 in 1937. The 1934-38 average of reported cases of this disease is 444. Although more cases were reported for each of the three years mentioned than the five-year average, it is believed that there was better reporting for those years with the expansion of county health work and an improved system of reporting, which were inaugurated in 1937. It is hoped that the decreasing trend of incidence of this disease indicated in the last three years will continue uninterruptedly until typhoid fever becomes a rare disease in Arkansas.

The annual meeting of Region II of the American Academy of Pediatrics, will be held at the Edgewater Gulf Hotel, at Edgewater Park, Mississippi, on **Friday and Saturday, March 15 and 16, 1940.**

An extraordinarily interesting program has been prepared for the scientific session and in addition to clinical papers, a wide variety of roundtable and panel discussions have been planned. Opportunity will likewise be afforded for a delightful recreation on the Gulf Coast during its most attractive season.

Region II of the Academy of Pediatrics comprises the southern states from Virginia to Texas, and a cordial invitation is extended to any physician to attend this meeting.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

OLDER writers, having observed that spontaneous pneumothorax was sometimes followed by arrest of pulmonary tuberculosis, were tempted to regard this phenomenon as one of nature's haphazard attempts to cure. The serious results, however, far outweigh the occasional beneficial results—spontaneous pneumothorax is a traumatic accident to be avoided if possible. Recent studies directed toward the underlying cause of spontaneous pneumothorax are re-awakening interest in the subject.

SPONTANEOUS PNEUMOTHORAX

Robert Charr reports 10 cases of fatal spontaneous pneumothorax. All cases were in the third and fourth decades of life; 6 were males and 4 females. Eight had pulmonary tuberculosis and 2 anthracosilicosis.

"In all, the onset of the pneumothorax was sudden, and it occurred while the patients were in bed. In none of the cases severe coughing, sneezing or any other form of physical exertion preceded the fatal accident. The chief complaints were dyspnea and pain in the same side of the chest as the pneumothorax. All showed cyanosis, clammy skin, weak pulse, dry mucous membrane of the mouth with thirst and apprehension of impending death."

At necropsy, it was found that in 7 of the cases the pulmonary rupture was in the mid-axillary aspect of the upper lobe and in 3 it was on the anterior surface about the midclavicular line. In 2 of the latter group the rupture was in the upper lobe and in one in the lower lobe. In all the perforation was either in the front or the axillary region of the lungs—in none on the posterior surface of the lung.

"In 3 cases with the rupture on the anterior surface of the lungs, the perforation took place through the center of large and acutely caseous tuberculous nodules, measuring about 1.5 cm. in diameter. The visceral pleura covering them was thin and transparent without adhesions to the adjacent parietal pleura. Following the ruptures deeper into the lungs led into irregularly shaped

and acute cavities in the center of caseous consolidation. The cavities varied in size and were located in the anterior half of the lungs. Projecting into the cavities were several stumps of bronchi and many cord-like structures cross-crossing the cavities, which on section proved to be the remnants of lung tissues. Excursion of the air through these bronchial stumps was free. When the air was rapidly pumped into the main bronchi, the perforated visceral pleura covering the caseous nodules ballooned out remarkably. The surface distribution of the caseous tubercles in these 3 cases was interesting. Practically all the acutely caseous tubercles were on the anterior portions of the lungs. The posterior parts showed principally congestion and areas of gelatinous pneumonia.

"In 7 cases with the ruptures in the axillary region, the character of the ruptures differed from those already described. In none did the perforation take place through the center of caseous tuberculous nodules as in the previous cases. There was much pleural thickening about the ruptures. The tuberculosis which was present in all excepting 2 anthracosilicotic cases was chronic in form with considerable fibrosis throughout the lungs. Although there were scattered caseous tubercles, many of them showed, on histological examination, fibrous capsules surrounding them. Furthermore none of these cases showed superficial tubercles as acutely caseous as those in the first 3 cases."

It seems that the immediate cause of the pulmonary rupture in these 7 cases may have been tugging on the pleural adhesions. There is considerable vertical excursion of the lungs due to the greater depth of the costophrenic angle at that point. The sliding motion of the lung upon the inner surface of the thorax is probably most marked along the axillary aspect of the chest, which, if that is the case, accounts for the marked tugging movement on the pleural adhesions along the axillary region.

The absence of pulmonary rupture on the posterior aspect of the lungs confirms the belief that the cause of spontaneous pneumothorax is largely a mechanical one. The front and the axillary portions of the thorax move more in respiration than the posterior parts where the ribs are attached to the spinal column. These factors of chest movement may be more pronounced when a person lies on his back.

The left side is more frequently involved than the right, the percentage being approximately 60 on the left and 40 on the right. Various theories have been advanced to account for left-sided preponderance but there seems to be no doubt that the heart action produces an additional pulmonary mobility on the left side.

Spontaneous pneumothorax occurs in diseases other than tuberculosis. In the author's present series, 2 cases had far advanced anthracosilicosis uncomplicated by tuberculosis. In one of these there were large emphysematous blebs in the midaxillary region of the upper lobes, rupture of which very likely produced the pneumothorax. Over these blebs the visceral pleura was considerably thickened, but the microscopical examination of the walls of the blebs showed extreme thinning of the elastic layer and at several points there was an actual breach in the continuity of the elastic lamina. In the other case the perforation of the lung was due to an extension of a cavity located in the center of a large anthracosilicotic mass in the right upper lobe.

Morphological changes of shock and related capillary phenomena were noted. These changes were marked diffuse congestion of capillaries and venules, especially in the lungs, liver and kidneys. Many of the alveolar spaces were filled with edematous fluid, and the capillaries were filled with blood. Supportive treatment usually employed in shock, in addition to withdrawal of air from the pleural space, which, of course, is

most important, may be of value. Wrapping the patient with blankets, giving hot drink, and oxygen and intravenous administration of fluid may be helpful, though Moon has warned against too much heat producing peripheral vasodilatation and loss of body fluid in the form of perspiration, which may aggravate shock.

Spontaneous Pneumothorax, Robert Charr, *Amer. Rev. of Tuber.*, Vol. XL, No. 5, Nov., 1939.

RESOLUTION

WHEREAS, Dr. L. Vallette Parmley, a member of the Pulaski County Medical Society, passed away on December 26, 1939; and,

WHEREAS, Dr. Parmley was a man of fine personality, of the highest integrity, of unusual talents, and distinguished attainments; a man of unfailing loyalty to organized medicine; a graduate of the University of Arkansas School of Medicine; a member of the Pulaski County Medical Society since 1922; a man who has served this society in many ways in positions of honor and trust as Vice-President, and as a delegate to the Arkansas Medical Society on many occasions; a man who has brought great honor to our Society through his service to the Arkansas Medical Society as Chairman of the Council and as Chairman of the Legislative Committee for eleven years; who, as first president of the Medical Arts Club, wielded good influence among the medical profession of our city; a citizen who stood high in the love of his fellow man;

THEREFORE, BE IT RESOLVED, That the Pulaski County Medical Society deplors the loss of one of its most esteemed members as a man who exemplified the true spirit of service.

RESOLVED, That we realize the city and state in organized medicine has lost one of its most useful, valued, and best loved citizens, and

RESOLVED, That we respectfully tender the family, relatives, and friends of the deceased our most sincere sympathy in their bereavement, and that these resolutions be spread upon our minutes and a copy sent to Mrs. Parmley.

K. W. COSGROVE,
O. C. MELSON,
VERNON NEWMAN,
Committee.

LEE VALLETTE PARMLEY**PETER A DEISCH, Helena**

Organized medicine in Arkansas is immeasurably poorer because of the death of Dr. Val Parmley, which occurred on December 26, 1939, after an illness of several weeks.

To adequately sum up his accomplishments, packed as his life was with unceasing original creative effort and devotion, is beyond the ability of our poor pen.

Born in Illinois, he early moved to this State, graduated from the University of Arkansas School of Medicine, and after his service in the medical corps of the United States Army during the World War, he engaged in the general practice of medicine at Jerome. He then came to Little Rock, and after extensive preparation became our first specialist in the field of traumatic surgery.

For a number of years and until the time of his passing, he was an instructor in the medical school, where he taught traumatic surgery.

He was signally honored by being appointed by the Governor as Director of the Crippled Children's Division of the State Welfare department, a field of effort in which he showed intense interest.

He early identified himself with the affairs of the Arkansas Medical Society, and always thereafter was a potent figure in its deliberations, and in shaping its policies.

He became chairman of the legislative committee in 1931, serving as such until 1938, when he was elected by the Council as its chairman. His efforts in this field at once showed that he regarded the position to which his colleagues called him not as an empty distinction, but as an opportunity for service.

He collaborated in the passage of the law giving physicians, nurses and hospitals a lien on judgments obtained by the patient; the law providing for lists of all those practicing the healing arts to be filed with the Secretary of State; the barbituric acid law; the statute of limitations law; the law providing that claims of physicians and nurses against estates shall be on an equal basis with those of undertakers, and that they shall take precedence over all others; the law authorizing our examining board to issue licenses when passed by the National Board of Medical Examiners. All this would be a small indication of his accomplishments, for he was at all times fighting the errors of those who would lower the standards of medicine, a battle that is unceasing.

In the general meetings of the Society we found him always advancing new ideas, new thoughts, fearless in the advocacy of those things which he felt would raise the standards of the profession. There we recognized his ability of leadership.

What we saw back of his life, running like a silver thread through every contact and every experience, greater than all the rest, was his loyalty. That is what he left for us, from which we may catch the inspiration from so shining an example. Read it all, consider well each page, and through it stands loyalty to his family; loyalty to his ideals; loyalty to his friends; loyalty to his profession; loyalty to his duties; loyalty to his principles; loyalty to himself. This is his contribution which may be carried on now through each of us.

The JOURNAL attempts to reduce its feelings to written words not only that there may be notice to those who follow, that here was a man who regarded his life as a public trust, but that we may catch his enthusiasm for the benefit of our profession and our State. There was courage and enthusiasm, but never malice or ill will in his make-up; when there were those who believed differently, it was always the belief and never the believer that he opposed. General recognition of this attitude gave him the friendship and esteem he enjoyed throughout his wide acquaintance.

The forces that drove Dr. Parmley to his striking accomplishments should still operate through us. The results of the work of men are never-ending. It is not possible to measure their volume or their worth. That is not necessary. It is sufficient to know that the good done by a man lives after him. But it cannot do so unless those who are the instruments of memory and performance along the same lines, are willing to give continuing life and purpose to his deeds. This now becomes our duty; to emulate his example as a constructive force in the onward march for real progress.

During his entire life he at all times stood resolutely for the highest and best in professional ideals, and in citizenship.

He loved his fellowmen, and because they felt it and knew it, they loved and trusted him.

He was an inspiring example of honest, courageous and progressive leadership, and a champion always of the highest concept of traditional organized medicine. His memory is a refreshing inspiration.

THE JOURNAL

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EDITORIAL

ANOTHER IN OUR MIDST

The Journal has been notified that one L. H. Ross, claiming to represent the Trencu Uniform Company of Trenton, New Jersey, has accepted orders and cash deposits from physicians in Arkansas recently, without delivery of goods ordered. These physicians writing about their orders have had their letters returned "Unknown" by the postal department. The Journal again reminds members that it is extremely poor policy to make cash deposits on orders given to strangers. Too, too often is this same story unfolded. The Journal may be pardoned again if mention is made of the fact that dealers advertising in The Journal are reputable and reliable, frequently sell their merchandise at prices

less than the canvasser at the office door, and support your official publication with their money.

EDITORIAL COMMENT

MEMBERSHIP ASSESSMENTS

Members are urged to make prompt payment of 1940 membership assessment to their county society secretaries. Prompt payment relieves the secretary of the onerous work of personally collecting the assessment and permits him to devote time to other affairs of the county medical society. Early renewal of membership is most important to the state society and the fullest cooperation is requested from each member. Members whose assessment is not received by March 1st are to be considered as delinquent.

The Journal feels it worthy of comment that Senator Hattie W. Caraway, in her recent illness and surgery, elected to choose a private physician and hospital for such care. This has not been the custom of a number of other members of Congress who have entered governmental service institutions in Washington, maintained, we are informed, for medical care of the army and navy personnel. The Journal is pleased to note that Senator Caraway gives more than lip service to her belief in the private, individualistic practice of medicine.

RECENT SUPREME COURT DECISIONS

In the June, 1939, issue, the Journal reviewed two recent opinions of the Supreme Court, upholding the validity of important laws which had been enacted on recommendation of our Society. These were the lien law, *Buchanan v. Beirne Lumber Co.*, 197 Ark. 635, and the statute of limitations law, *Steele v. Gann*, 197 Ark. 480.

On Jan. 15, 1940, the Supreme Court announced its decision upholding the Basic Science Law in every particular. This law was passed over strenuous opposition on the cultists, and other irregulars, in 1929, and marks the third important victory which we have recently won in the Supreme Court. None of our laws have ever been declared invalid.

We will more fully review the opinion in the next issue.

PROCEEDINGS OF SOCIETIES

Crawford County Medical Society has elected the following officers: President, O. J. Kirksey, Mulberry; Vice-president, S. D. Kirkland, Van Buren, and Secretary-Treasurer, B. B. Bruce, Alma.

Benton County Medical Society has elected the following officers: President, J. L. Pickens, Bentonville; Vice-president, G. A. Hughes, Siloam Springs; Secretary-Treasurer, Geo. M. Love, Rogers; Delegate, M. W. Chastain, Bentonville; Alternate, Geo. M. Love, Rogers, and Censors, Guy Hodges, Rogers, A. J. Harrison, Springdale, C. S. Wilson, Siloam Springs.

Searcy County Medical Society has elected the following officers: President, E. W. Wood, Marshall; Vice-president, J. O. Leslie, Marshall; Secretary-Treasurer, Sam G. Daniel, Marshall; Delegate, E. W. Wood, and Alternate, J. O. Leslie.

The Benton County Medical Society met in dinner session at Rogers January 9th for an address, "Socialized Medicine of the Veterans' Administration," Frank N. Gordon, Fayetteville.

Geo. M. Love, Secretary.

The Pulaski County Medical Society was addressed January 15th by G. W. Reagan and John N. Roberts, "Urinary Extravasation" (motion picture).

E. H. WHITE, Secretary.

Madison County Medical Society has elected the following officers: President, Chas. B. Beeby; Vice-President, N. J. Hill, and Secretary-Treasurer, Fred Youngblood.

Washington County Medical Society has elected the following officers: President, Ruth Ellis Lesh; Vice-President, Fount Richardson, and Secretary-Treasurer, Friedman Sisco.

Nevada County Medical Society has elected the following officers: President, F. A. Hughes; Vice-President, J. B. Hesterly; Secretary-Treas-

urer, L. J. Harrell; Delegate, J. B. Hesterly, and Alternate, F. A. Hughes.

Faulkner County Medical Society has elected L. L. Hassell, President, and J. S. Westerfield, Secretary-Treasurer. This is Dr. Westerfield's 34th consecutive term.

Hempstead County Medical Society has elected the following officers: President, P. B. Carrigan; Vice-President, J. W. Branch; Secretary-Treasurer, Jim McKenzie; Delegate, P. B. Carrigan, and Alternate, Jim McKenzie.

Chicot County Medical Society has elected the following officers: President, C. G. Leverett, Eudora; Vice-President, E. P. McGehee, Lake Village; Secretary-Treasurer, W. J. Schwarz, Lake Village; Delegate, J. H. Burge, Lake Village, and Alternate, W. D. Easterling, Lake Village.

Phillips County Medical Society has elected the following officers: President, Geo. R. Storm; Vice-President, A. E. Cox; Secretary-Treasurer, H. H. Rightor; Delegate, J. Q. Blackwood, and Alternate, A. H. Maddox.

The Arkansas County Medical Society was addressed at its January meeting by Fred Hames, Pine Bluff, "Skin Malignancy," and E. C. McMullen, Pine Bluff, "Appendicitis in Children." The following officers were elected: President, E. B. Swindler; Vice-President, C. W. Rasco, Sr.; Secretary-Treasurer, Tom S. Van Duyn; Delegate, S. A. Drennen, and Alternate, R. H. Whitehead.

Randolph County Medical Society has elected the following officers: President, J. W. Brown; Vice-President, R. O. Smith; Secretary-Treasurer, M. A. Baltz; Delegate, J. R. Loftis; Alternate, E. L. Handley, and Censors, W. O. Loftis, J. W. Ryburn, and J. W. Brown.

Miller County Medical Society has elected the following officers: President, B. C. Middleton; Vice-President, J. T. Porter; Secretary-Treasurer, J. Wirt Burnett; Delegate, H. E. Murry; Alternate, N. B. Daniel, and Censor, T. F. Kittrell.

The Fifth Councilor District Medical Society met at El Dorado, January 9th for the following program: "Impulses Affecting Respiration Passing Over Sympathetic Pathways," S. P. Cromer, Little Rock; "Endocrine Therapy as Applied to Gynecology," Conrad Collins, New Orleans, and "Inhalation Therapy," Wayne M. Hull, Oklahoma City.

The eighth postgraduate session of the Society was held in Little Rock, January 24th-25th, the following program being presented: "Operative Treatment in Pulmonary Tuberculosis," Harvey Shipp; "The Diagnosis and Treatment of Common Ailments of the Rectum and Anal Canal," Hoyt R. Allen; "Hypothyroidism," Henry H. Turner; "The Relationship of Trauma to Tumors," Ferdinand C. Helwig; "Interpretation of Laboratory Findings," M. J. Kilbury; "Frequent Mistakes in the Diagnosis of Cardiovascular Diseases," Raymond Gregory; "Pituitary-Adreno-Gonadal Dyscrasias," Henry H. Turner; "Carcinoma of the Stomach; Its Incidence in Arkansas: Its Early Diagnosis," Henry Hollenberg; "Tumors of Bones," Charles F. Geschickter; "Methods and Findings in the X-ray Examination of the Lower Part of the Back," D. A. Rhinehart; "Low Back Pain from the Standpoint of the Orthopedic Surgeon," Joe F. Shuffield; "Low Back Pain from the Standpoint of the Urologist," H. Fay H. Jones; "Low Back Pain from the Standpoint of the Gynecologist," Joe H. Sanderlin; "The Relationship of Trauma to Heart Disease," Ferdinand C. Helwig, and "Tumors of the Breast," Charles F. Geschickter.

Lincoln County Medical Society has elected the following officers: President, C. W. Dixon, Gould; Vice-President, G. C. Wood, Grady; Secretary-Treasurer, L. T. Taylor, Star City; Delegate, R. L. Johnson, Grady.

WANTED—A physician at Colt, Arkansas, account death of Dr. Ernest Darnall. Furniture and fixtures for sale. Office building for rent. Write Mayor R. E. Riggs, Colt, Arkansas.

PERSONALS AND NEWS ITEMS

MARRIED—On January 8th at Hot Springs National Park, M. B. Bowman and Miss Eleanor Virginia Klugh.

Drs. J. R. and W. O. Loftis recently suffered a fire loss in their clinic building at Pocahontas.

F. G. Engler, formerly of Alma, has accepted appointment on the staff of the State Hospital at Little Rock.

N. C. Hodge, Marianna, has been elected trustee of the Methodist Hospital at Memphis.

J. J. Monfort has been elected president of the Batesville Kiwanis Club.

MARRIED—On December 29th, John M. Samuel and Miss Irene Gaston, of Little Rock.

Guy Hodges, Rogers, took postgraduate work at Tulane University during January.

T. Duel Brown, Little Rock, took postgraduate work at the Mayo Clinic during January.

Dr. and Mrs. Hugh Johnson, Fort Smith, spent a January vacation in Mexico.

I. F. Jones has been elected a member of the Executive Committee of the Fort Smith Community Chest.

Dr. and Mrs. Fount Richardson, Fayetteville, attended the Sugar Bowl game in New Orleans January 1st.

Jos. F. Shuffield addressed a recent meeting of the Pulaski County Safety and First Aid Council at Little Rock.

B. L. Ware has been elected vice-president of the Farmers Bank at Greenwood.

A. F. Hoge has been elected a director of the City National Bank at Fort Smith.

W. G. Hancock is erecting an office building at Rison.

G. E. Cannon, Hope, has donated a portable cottage for the use of tuberculosis patients in Hempstead county.

The Regional Conference of the American College of Surgeons at New Orleans during January was attended by J. B. Jameson and R. B. Robins, Camden; Fred H. Krock, Fort Smith; A. D. Cathey and J. B. Wharton, Jr., El Dorado; E. F. Ellis and Ruth Ellis Lesh, Fayetteville; H. Fay H. Jones, Ellery C. Gay, Joe F. Shuffield, Harvey Shipp, Chas. R. Henry, and C. C. Reed, Jr., Little Rock.

G. G. Woods, Huntington, has been elected a director of the Bank of Mansfield.

J. S. Coffman has been elected a director of the Citizen's Bank, Lavaca.

E. H. Abington and J. R. Sloan have been elected president and vice-president, respectively, of the Citizens Bank at Beebe.

E. A. Callahan has been elected vice-president of the Citizens Bank at Carlisle.

B. C. Clark has been elected director of the Bank of Lake Village.

W. F. Adams recently addressed the Fort Smith Junior Chamber of Commerce on "Socialized Medicine."

Dr. and Mrs. J. S. Rinehart, Camden, spent a winter vacation in California.

J. H. Hellums, Dumas, has accepted a weekly instructorship at the University of Arkansas School of Medicine.

H. Fay H. Jones, Little Rock, appeared on a panel program of the recent session of the American College of Surgeons at New Orleans which was devoted to "Treatment of the Genitourinary Tract."

E. H. Abington has been elected a director of the Beebe Kiwanis Club.

W. S. Crawford has been elected a director of the First National Bank at Marianna.

The following have been elected officers of the staff of Saint Vincent's Infirmary, Little Rock: President, R. J. Calcote; Vice-President, J. M. Compton, and Secretary, R. E. McLochlin. Divisional chiefs are: Surgery, H. W. Hundling; Medicine, S. C. Fulmer, and Obstetrics, Clyde D. Rodgers.

RANDOM THOUGHTS OF THE SECRETARY

December 23rd. Remembered by countless friends with Christmas cards for which we are most appreciative. Clyde McNeil sends a bushel of those wondrous Benton county apples, the consumption of which we hope will keep all doctors away unless on social calls.

December 24th. With the youngster to church this morning, almost losing our Sunday dignity when he quietly pulls from beneath his sweater a copy of "Ken Maynard and the Gun Wolves of the Gila," with which he proposes to while away the sermon hour.

January 1st. Not only a New Year, but a new decade—ahead lie ten years in which we fervently hope we can give a greater measure of service to patients, colleagues, friends, and our country.

January 7th. Snow in arctic quantities blankets the scene, beautiful beyond description but bringing difficulties in similar degree to practicing physicians.

January 8th. Convening with the national guard, traveling by rail, and thankful for a train. It would seem that Stanley Gates is the only other medical officer who felt called upon to attend this meeting, the must tone of the regimental commander to the contrary.

January 9th. This afternoon arousing some youthful enthusiasm for the event, we tow the youngster's sled many, many times up the hill that he may swiftly, all too swiftly, descend and try it again.

January 11th. With dentists and legislators as additional guests, Sebastian County Medical Society enters into the gayety of its 65th annual banquet. What had promised to be, for us, a toastmaster without a banquet, becomes another great event. Among those invited but missing is that affable general practitioner, Fay Jones, who writes that he cannot come because Duel is out of town.

January 18th. Now for many a day reading of the trial at Little Rock and finding no cause for comment. Pleasurably elated to find ourselves quoted on the editorial pages of The Journal of the Indiana State Medical Association by good friend Shanklin, which we rightly feel is publicity plus.

January 19th. This day visiting the eye doctor, Everett Moulton, who, by some process, takes the white light shining before us, extracts therefrom a red light of the same size, and then proceeds to cause the red light to do aerial acrobatics for us.

January 24th. This day we induce Sid to travel by rail to Little Rock as we attend the postgraduate course, earning thereby the gratitude of Elizabeth and Peggy, but forced to endure Sid's sarcastic comments all the while. Arriving in time for the luncheon we tarry a bit with the Robins' in their room at Little Rock's "most ritzy" hotel, a room they are privileged to enjoy only to the strictly enforced check-out hour. The check-out hour rule is more rigidly enforced here than in many another hotel, possibly as high class in all respects. At the afternoon meeting, Helwig briefly refers to previous visits in Arkansas, omitting some of the hilarity which these occasions have afforded, all well known to these chronicles. In session for a while with the Council, discussion of the Farm Security plan making all a bit restive to get away, and thence home, acquiring much of anecdote concerning the Baker trial in the Pullman smoker.

OBITUARY

ERNEST DARNALL, age 55, of Colt, died in a hospital January 2nd. Born in Kentucky, he graduated from the Memphis Hospital Medical College in 1908 and had formerly practiced in Widener, Clarendon and Holly Grove. During the World War he served nearly two years with the army medical corps as a first lieutenant. He was a member of the Presbyterian church. Surviving relatives are his wife and two daughters.

JAMES ERWIN HARDAWAY, age 67, of Lynn, died in a hospital at Batesville January 4th. Dr. Hardaway had practiced for 22 years in Lawrence County. Surviving relatives are his wife, two sons and five daughters.

LEE VALLETTE PARMLEY, aged 47 years, died at Little Rock, December 26th, after an illness of several months. Born January 31, 1892, at Centralia, Illinois, he spent his youth at Booneville and graduated from the University of Arkansas School of Medicine in 1916. Subsequent to an internship at Saint Vincent's Infirmary, he served with the army medical corps, being discharged from service with the rank of captain on November 23, 1920. He maintained his reserve commission of major, medical corps, following discharge. In 1921 he began the private practice of medicine at Jerome, moving

to Little Rock in 1929, where he devoted himself to the field of traumatic surgery. He inaugurated the chair of traumatic surgery at the University of Arkansas School of Medicine and headed the department until his death. For twelve years he served as Chairman of the Committee on Medical Legislation, during which time such important measures as the basic science law, the medical lien law, and many other bills were enacted. He became a member of the Council and its Chairman on December 9th, 1937. In addition to his active interests in the Arkansas Medical Society, he was one of the organizers and a past-president of the Medical Arts Club; charter member of the American Association of Industrial Surgeons; chairman of the Southern Section of the American Congress for Physical Therapy; Fellow of the American Medical Association and of the American College of Surgeons; member of the Southern Medical Association, and a former vice-president of the Mid-South Postgraduate Medical Assembly. He represented the Arkansas Medical Society as delegate to the American Medical Association in the sessions of 1936 and 1937. Other affiliations were with the American Legion, the Military Order of the World War, the Elks, Trinity Cathedral, and the Little Rock Country Club. He organized and directed the Crippled Children's Division of the State Welfare Department from January, 1938, until June, 1939. Surviving relatives are his wife, his father, and a sister.

NATIONAL CONFERENCE ON MEDICAL SERVICE

The 1940 program of the National Conference on Medical Service (formerly Northwest Regional Conference) will afford an opportunity for doctors of medicine throughout the United States to exchange ideas and obtain sound practical information on medical economics for the good of the profession and the public.

At the Fourteenth Annual Meeting, to be held at the Palmer House, Chicago, Sunday, February 11, 10:00 a. m. to 4:30 p. m., a round-table on "Group Medical Care and Group Hospitalization Programs" will be presented. Invited to participate are R. L. Sensenich, M. D., South Bend, Indiana; Carl F. Vohs, M. D., St. Louis, Missouri; Henry R. Carstens, M. D., Detroit; George H. Kress, M. D., San Francisco, and D. H. McA. Pyle, of New York City.

"Allocation of Federal Funds to States" will be presented by R. G. Leland, M. D., of the American Medical Association Bureau of Medical Economics. The discussion leader on this topic will be Wm. F. Braasch, M. D., of Rochester, Minnesota.

Morris Fishbein, M. D., and Edward J. McCormick, M. D., of Toledo, will discuss "Effective Public Relations."

For the round-table on "Medical Welfare Programs" the following have been invited to participate: Hilton S. Read, M. D., Atlantic City; C. H. Phifer, M. D., Chicago; Creighton Barker, M. D., New Haven, Conn.; Ernest E. Shaw, M. D., Indianola, Iowa; and R. C. Williams, M. D., of Washington, D. C.

All members of the American Medical Association are cordially invited to attend the Conference. No registration fee or dues.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Dear Auxiliary Members:

As we go into February our Auxiliary is reaching the latter part of our year's program. The next board meeting will be held very early in February, and it behooves us to have our reports ready, showing just what our Auxiliaries over the state have accomplished. Every Auxiliary member is urgently requested to attend to every detail assigned to her in order that every County President, State Officer, and State Chairman may bring to this board meeting a complete report of all projects carried out since September.

Mrs. Oats' enthusiastic letter was a strong appeal to all of us for a larger contribution to our Student Loan Fund. The organization of our two new county Auxiliaries, Jefferson county and Franklin county, are an incentive to have others. Jefferson county has fourteen members and Franklin county has five.

I trust that all county Auxiliaries have had at least one Public Relations meeting. Please plan another for one of the spring months. Your lay friends must be given authentic information on Socialized Medicine.

All news items are interesting to members; please get them to Mrs. Murry on or before the first of each month.

Mrs. Wolfermann will submit her plans for Cancer Control Program in the March Journal.

Each Auxiliary is urged to observe "Doctors Day" in March.

My best wishes to all of you for 1940.

Sincerely,

(Mrs. C. E.) Bess Kitchens.

At the November meeting of the Jefferson County Auxiliary, Mrs. Kitchens and Mrs. Redman were guests at dinner at the Hotel Pines. Mrs. Kitchens gave a very interesting talk on the Auxiliary work. We were so happy to meet these two ladies.

The Auxiliary met December 5th. Mrs. John Walker presided in the absence of the president, Mrs. Virgil Payne. Mrs. J. C. Beard was appointed Hygeia Chairman, and Mrs. Hunter Causey, Physical Examination Chairman. Mrs. Fred Hames talked on the Southern Medical Convention.

The Ladies Auxiliary to the Ouachita County Medical Society was entertained December 14th by Mrs. S. D. McGill and Mrs. R. C. Kennerly with a lovely dinner in the Ouachita Hotel.

Yuletide decorations were used in the dining room and on the table. Following the dinner a short business session was held, presided over by the president, Mrs. R. V. Powell.

The minutes of the last meeting were read and approved.

The program consisted of a very interesting discussion, given by Mrs. C. S. Early and Mrs. B. V. Powell, of the Southern Medical Meeting, in Memphis.

After a social hour the meeting adjourned to meet again at the call of the president.

Mrs. R. H. Whitehead.

The Washington County Medical Society Auxiliary held both regular meetings in December.

The second meeting was a Christmas party at the home of Mrs. Loyce Hathcock. Members took gifts for children who are in the hospital. A most delightful afternoon was spent.

Best wishes to all for a Happy New Year.

Mrs. P. L. Hathcock,
Fayetteville, Arkansas.

On Monday evening, December 18th, the Southeast Arkansas Medical Society and Auxiliary were entertained with a turkey dinner in the home of Dr. and Mrs. H. T. Smith, of McGehee, guests of Drs. Smith, White, and Leverett.

The rooms were beautifully decorated in red and silver. The large dining table was centered with red and silver cornucopias, with red candles. The small tables with red candles in silver holders.

After an hour spent with Professor Quiz, and other games, gifts were distributed from a brilliantly lighted Christmas tree, arranged in the sun parlor.

The doctors and their wives, of McGehee, are most gracious hosts, and an evening spent with them is always eagerly anticipated.

Mrs. M. C. Crandall,
Publicity Chairman.

The Woman's Auxiliary to the Medical Society held its first fall meeting in October at the home of Mrs. S. C. Fulmer with Mrs. Hoyt Choate, Mrs. A. F. Pirnique, Mrs. G. W. Reagan, Mrs. Ellery Gay, and Mrs. E. I. Thompson as co-hostesses. A buffet luncheon was served in the dining room from a table covered with an Italian cutwork cloth. A silver bowl was filled with yellow pom-pom chrysanthemums, talisman rosebuds and ageratum. Mrs. L. F. Barrier and Mrs. W. A. Snodgrass presided at the table. Arrangements of red roses, gladiolus, petunias, and verbenias were used throughout the rooms. Mrs. Barrier, president, presided at the afternoon business session. Officers and committee chairmen gave their reports, and the yearbooks were distributed. Mrs. S. C. Fulmer, program chairman, introduced Miss Patricia Murphy, who played Chopin's Prelude in C Major, "Bala-guena" by Lecuona and Braham's Waltz in C Major. Miss Zonola Longstreth was the guest speaker. Her subject was, "Things to Think About." There were 60 members present.

The November meeting of the Woman's Auxiliary to the Pulaski County Medical Society was held at the home of Mrs. J. Donald Hayes with Mrs. Clyde Rodgers, Mrs. Bryce Cummins, Mrs. T. D. Brown, Mrs. Don Hardeman, and Mrs. R. E. McLochlin, co-hostesses. Autumn flowers and fruit were used in decoration. The luncheon was served buffet style with Mrs. S. C. Fulmer and Mrs. W. N. Freemyer at the table. There were 41 members present. Mrs. Fulmer, program chairman, introduced Miss Erle Chambers, executive secretary of the Arkansas Tuberculosis Association, who spoke on the "Program of the Association in Arkansas." A business session was held with Mrs. L. F. Barrier presiding.

The Pulaski County Auxiliary held the December meeting at the home of Mrs. L. D. Reagan with Mrs. M. E. McCaskill, Mrs. R. M. Eubanks, Mrs. Alan Cazort, Mrs. R. A. Law, and Mrs. Harry Hayes as hostesses. Luncheon was served to 40 guests, with Mrs. L. F. Barrier and Mrs. W. A. Snodgrass presiding at the table, which was decorated with poinsettias, holly, and red candles. Mrs. J. T. Newman was a guest. Mrs. Barrier presided over the business session. Reports were given by Mrs. Vernon Newman, Mrs. D. M. Switzer, Mrs. K. W. Cosgrove, Mrs. C. A. Rosenbaum, and Mrs. T. D. Brown. Mrs. S. C. Fulmer, program chairman, presented Miss Mary Beth Langston in a Christmas reading. The Choral Club of the Little Rock Departmental Club, under the direction of Mrs. Winston Moody, and accompanied by Mrs. A. F. Pirniquie, sang a group of Christmas carols.

Observing an annual custom, members of the Bowie-Miller counties Medical Society Auxiliary honored their husbands at a banquet the night of December 9th at Hotel McCartney. The long U-shaped table emphasized the holiday motif with sprays of nandina berries interspersed with red candles in holders formed of peppermint candy canes tied with huge cellophane bows.

Invocation was given by Rev. Herbert Duenow.

Mrs. R. C. Cross, president of the Auxiliary, greeted the guests, and introduced the toastmaster, Dr. R. R. Kirkpatrick.

Mrs. Cross told briefly of the accomplishments of the Auxiliary, including a \$15 contribution to the tuberculosis sale fund. Mrs. Cross announced that the Auxiliary is 100 per cent in subscriptions to Hygeia, official magazine of the American Medical Association.

Following dinner Dr. Kirkpatrick presented Dr. L. J. Kosminsky in two songs, accompanied by Dr. J. Wirt Burnett.

Several of the doctors were quizzed in a "true or false" program, conducted by Dr. Kosminsky.

Mr. Duenow, after dinner speaker, in his inimitable style of wit and humor, gave his "Philosophy of Life." He facetiously announced his candidacy for governor of Arkansas, his campaign slogan to be "pass the doughnuts Duenow." He expressed confidence in such a slogan saying "it has been done."

Christmas carols were sung at the conclusion of the evening. Mrs. N. B. Daniel, chairman of entertainment,

and her committee composed of Mrs. Roy Baskett, Mrs. Alan Collom, Mrs. R. W. Pickett, Mrs. P. M. Phillips and Mrs. H. E. Murry were in charge of arrangements. Several out-of-town doctors and their wives were present.

Plans for their part in the entertainment program for a state meeting of the Arkansas Medical Society, were discussed by members of the Auxiliary of the Sebastian County Medical Society at a luncheon meeting, Jan. 8th. The Auxiliary president, Mrs. I. Fulton Jones, presided.

Mrs. W. R. Brooksher, Jr., and Mrs. Charles T. Chamberlain were hostesses. The state meeting in this city will be April 15, 16, and 17. Mrs. Brooksher was named general chairman for the Auxiliary's activities in entertainment of convention visitors. Mrs. W. F. Rose, chairman of publicity for the convention.

Fifteen guests for the luncheon and meeting were: Mrs. I. Fulton Jones, Mrs. Walter G. Eberle, Mrs. S. P. Stubbs, Mrs. Eugene Stevenson, Mrs. Hardy H. Smith, Mrs. J. S. Southard, Mrs. Fred Krock, Mrs. B. W. Freer, Mrs. Everett Moulton, Mrs. D. W. Goldstein, Mrs. A. A. Blair, Mrs. M. E. Foster, Mrs. W. F. Rose, and the hostesses, Mrs. Brooksher and Mrs. Chamberlain.

Mrs. W. F. Rose,

Publicity Chairman for the Auxiliary of the Sebastian County Medical Society.



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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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BOOK REVIEWS

Practice of Allergy. By Warren T. Vaughn, M. D., Richmond, Virginia. Pp. 1082. 338 illustrations. Price, \$11.50. Saint Louis: C. V. Mosby Company, 1939.

This book not only may be used as a text but is splendid for reference. All fields of allergy are thoroughly covered. In a comprehensive manner, plates, charts and outlines are presented and readily found. Discussions throughout the book are thorough and to the point. The usual word barrage is eliminated.

Tumors of the Hands and Feet. By George T. Pack, B. S., M. D., F. A. C. S., Assistant Clinical Professor of Surgery, Yale University School of Medicine and Cornell University College of Medicine; Attending Surgeon, Memorial Hospital for Cancer and Allied Diseases, New York. Pp. 140. Illustrated. Price, \$3.00. Saint Louis: C. V. Mosby Company, 1939.

This small book has been reprinted from the January, 1939, issue of "Surgery" and comprises the general consideration of the subject, diagnosis and therapy, with special attention to modern radiological methods. While brief, the presentation is by eminent authorities and authoritative. A need has been met by the publication of this volume.

Nutrition and Diet in Health and Disease. By James S. McLester, M. D., Professor of Medicine, University of Alabama, Birmingham, Alabama. Third edition, entirely rewritten. 838 pages. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$8.00.

The author first discusses the utilization of food and vitamins; their use, function, storage and toxic effects in health. He then takes up the diseases affected by nutrition and diet and gives diets, rather liberal in their contents, for each disease.

The volume as a whole is well written from a nutritional standpoint.

Varicose Veins: By Alton Ochsner, B. A., M. D., D. Sc. (Hon.) F. A. C. S., William Henderson Professor of Surgery and Director of the Department of Surgery, School of Medicine, Tulane University of Louisiana, New Orleans, and Howard Mahorner, B. A., M. D., M. S. (Surgery), F. A. C. S., Assistant Professor of Surgery, School of Medicine, Tulane University of Louisiana, New Orleans. Pp. 147. 50 illustrations. 2 color plates. Price \$3.00. Saint Louis: C. V. Mosby Company, 1939.

A well-written monograph giving anatomy, pathology, physiology, etiology in sufficient detail. The last three chapters are concerned with the examination, explaining various tests in a simple way, and the treatment with its contraindications. The treatment of varicose ulcers is also given. This is a complete and satisfactory text.

The 1939 Yearbook of General Surgery: Edited by Everts A. Graham, M. D., Professor of Surgery, Washington University School of Medicine; Surgeon-in-Chief of the Barnes and the Children's Hospital, Saint Louis. Pp. 796. 304 illustrations. Price \$3.00. Chicago: The Yearbook Publishers, 1939.

The plan of this volume is to give the student of surgery a concise presentation of surgery by various authorities in the field, among whom are our greatest living surgeons. The 1939 Yearbook has aptly been termed a "symposium by the eminent surgeons of the



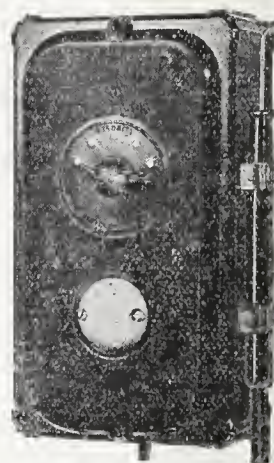
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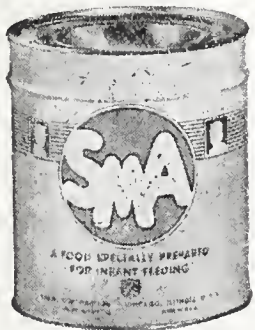
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world under the leadership of Dr. Graham." To all who are interested in surgery it is invaluable as a practical and technical condensed review of the latest reports of world-wide authorities. The physician in practice will find much which applies to his every day work, and the surgeon of wide experience will get an idea of methods and thought processes of his colleagues here and abroad.

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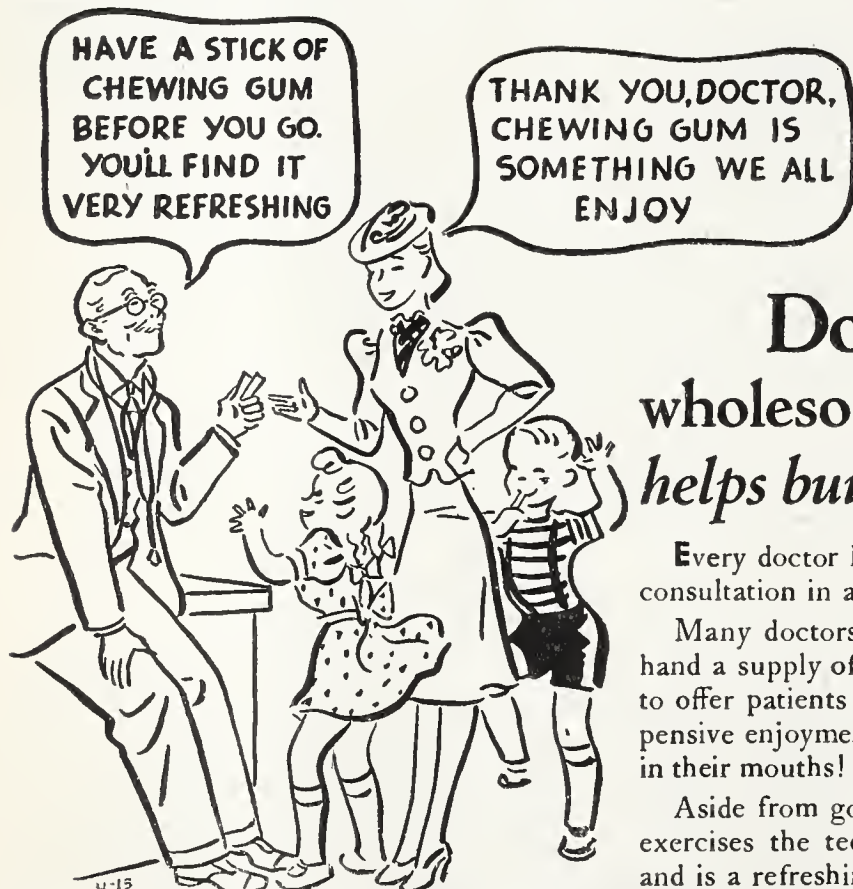
The Health Insurance Doctor: His Role in Great Britain, Denmark, and France: By Barbara N. Armstrong. Pp.

264. Price \$3.00. Princeton, New Jersey: Princeton University Press, 1939.

There is admission of bias on the part of the author on the jacket of this volume—"for more than two decades has campaigned vigorously for health insurance." Nevertheless, the book is of considerable value for reference to all interested persons. We do not feel that the author has made much progress in her evident desire to convince physicians in America that they would do well under a similar plan of furnishing medical care. On the other hand, we feel that she has made good exposition of the conflicts and complexities which surround this type of practice. The elaborate administrative machinery needed to correct abuses of certification is well described. In general the survey of these forms of practice is completed and detailed, perhaps better than in any other work.

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THE TREATMENT OF ANTE-PARTUM HEMORRHAGE*

B. JAMES REAVES, M. D.

Little Rock

Maternal mortality studies have become food for thought for the profession as well as for an ever-increasing lay public. Obstetrics and its complications have taken the spotlight in the field of public interest. It, therefore, is of the utmost importance for us to review the complications in obstetrics that are likely to swell the maternal mortality figures. Infection, toxemias of pregnancy, and hemorrhage are the major complications incidental to pregnancy which cause the majority of the maternal deaths. The Children's Bureau reported a 11 per cent maternal mortality due to hemorrhage in pregnancy.

Many patients survive the immediate blood loss resulting from the obstetrical complication and its treatment to eventually succumb from the superimposed infection. It is well known that anemic patients withstand infections poorly, so that an infection already present in the genital tract or introduced into it by the necessary manipulations, finds an ideal host in the exsanguinated patient. Thus, the deaths of many of the patients from sepsis can be indirectly chargeable to the blood loss.

All bleeding occurring during pregnancy must be considered pathologic in character. Bleeding after conception is never normal. The important causes of bleeding can be divided into two periods: During the first three months of pregnancy, abortion and ectopic gestation account for most instances of bleeding; during the last trimester, placenta praevia and abruptio placentae are the important causes.

In the treatment of hemorrhage in pregnancy, a correct diagnosis must first be established. In the first trimester of pregnancy it is usually

necessary to treat the patient in a hospital, but a patient with bleeding in the last trimester must always be hospitalized.

The differential diagnosis between abortion and ectopic pregnancy are of the utmost importance in the treatment of these conditions. Abortion occurs with the greatest frequency between the eighth and twelfth week of the gestation while tubal pregnancy may first manifest itself from the fourth to the sixth week. The bleeding in tubal pregnancy is uterine in origin, resulting from decidual separation, and usually is indicative of fetal death in the fallopian tube. The bleeding is usually moderate in amount, and often chocolate colored. Decidual fragments or a complete decidual cast may be passed. The bleeding in uterine abortion is often very profuse and bright red in color. In that all the bleeding is external, the amount of blood lost is a fair index of the amount of blood the circulation has lost. In tubal gestation the pain is usually stabbing in character, rarely colicky, and often referred to the affected side. It may be associated with a feeling of faintness or vomiting as a result of the peritoneal irritation. The pain in abortion is cramp-like, rhythmical and resembling labor pains. On examination in tubal pragenancy an adnexal mass can usually be felt to one side of the uterus which is semi-fluctuant, sensitive, and boggy. If there has been considerable free bleeding, the cul-de-sac on palpation will feel full, soft and boggy due to the accumulated blood. The uterus will be slightly enlarged and distinctly softened. In uterine abortion the uterus will be enlarged to the size commensurating with the period of amenorrhea. The adnexal regions will be negative to palpation. The cervical os may be partially dilated. Absolute diagnosis may rest upon the examination of the uterine contents, which would show chorionic villi and syncytium in an intrauterine gestation but only decidua where the gestation is in the tube.

* Read before the Sixty-fourth Annual Session, Arkansas Medical Society, Hot Springs National Park, May 10, 1939.

The treatment of abortion depends on the stage of the process, the extent of the hemorrhage, the duration of the pregnancy, and the presence of infection.

A complete abortion is one in which the entire ovum has been passed. This is most likely to occur before the formation of the placenta and before the eighth week of the gestation when the entire chorionic membrane is covered by villi. It is less likely to occur after the placenta has been formed. Usually, with the passage of the uterine contents, bleeding subsides, and may not recur again unless portions of the ovum have been left behind. Oxytocic drugs can be given to hasten uterine involution. The best of these is probably ergotrate. If bleeding of any consequence recurs it is likely that the abortion has not been complete. It is then usually advisable to subject the patient to a dilatation and curettage, providing she has no fever or other evidence of infection. After a complete abortion the patient should spend about one week in bed, whereupon she can resume her usual duties.

In incomplete abortion a part of the gestation, which is usually the fetus, has spontaneously been expelled from the uterus and the placenta membranes have remained in the uterine cavity. If little bleeding occurs it may be well to await the completion of the process without interference. The separation and expulsion of the placenta and membranes can be hastened by the use of oxytocic drugs. Usually after a number of hours the uterus expels what is left of the pregnancy by its own uterine motility. This results in the cessation of the bleeding and of the abdominal cramps. One should carefully examine all the tissue passed so that it can be ascertained if the entire ovum has been expelled.

Should profuse bleeding occur in an incomplete abortion one must evacuate the uterus by means of curettage. Placental forceps and large, dull curettes are probably safer instruments than the sharp curette. It is important to thoroughly empty the uterus at this time. Oxytocic drugs are of value in controlling the bleeding, although occasionally it is necessary to carefully tamponade the uterine cavity with gauze in order to control the hemorrhage. Wherever possible it is advisable not to pack the uterus because of the additional danger of infection.

When a patient has had symptoms of abortion for some time and these symptoms become so aggravated that the abortion can no longer

be averted it is said to be inevitable. Usually the bleeding is only moderate in amount and one can await the expulsion of the uterine contents. This process can be hastened by increasing the uterine motility again with the aid of pituitary extract and ergotrate. However, the bleeding may be rather profuse so that it is not desirable to await spontaneous evacuation of the uterine contents. Instrumental curettage is then advisable. Usually there is sufficient dilatation so that the entire contents of the uterus can be evacuated. The abortion can then be treated as previously described.

In the treatment of abortion the consideration of hemorrhage is of the utmost importance. This will be described when the various causes of antepartum bleeding have been considered.

Septic abortion is one in which infection has occurred, either as a result of previous manipulation in an effort to induce the process, or a result of an existing infection in the genital tract. The abortion should be considered febrile whenever the temperature is elevated, and no manipulation should be instituted. The only indication for active interference in the treatment of febrile abortion is hemorrhage. Should the bleeding become profuse it may be necessary to evacuate the uterine contents by means of a dull curette or to pack the uterine cavity for this purpose. The usual treatment of septic abortion consists in good nursing care, plenty of fluids, supportive treatment and the institution of drainage should a localized pelvic infection occur. When the temperature and pulse rate have returned to normal and have remained normal for five or six days it is then probably safe to evacuate the uterus by means of curettage if this seems necessary.

The treatment of ectopic pregnancy is always surgical. After one has made a diagnosis of tubal abortion, or tubal rupture, it is usually advisable to perform a laparotomy at which time the involved tube is removed. It is important not to operate the patient while she is in shock. Although in some cases it may be necessary to begin the surgery at the same time that the patient is being transfused. It is important to replace the blood loss as rapidly as possible in order to maintain the blood volume as well as to provide sufficient hemoglobin. Recovery is usually rapid and uneventful.

The treatment of placenta praevia is individualized according to the conditions in the patient. If it is found on sterile vaginal examina-

tion that the edge of the placenta is palpable high in the lower uterine segment we conclude that we are dealing with a **low insertion of the placenta**. This type of placental insertion occasionally causes considerable bleeding, but its management is not difficult. Usually, simple rupture of the membranes is all that is necessary. After the escape of the amniotic fluid the presenting part may descend into the pelvis and compress the placenta satisfactorily, thereby controlling the bleeding. After this the patient usually goes into labor. The labor itself may be entirely uneventful.

Occasionally the edge of the placenta is palpable at the margin of the external os. This condition is diagnosed as a **marginal placenta praevia**. Here again, simple rupture of the membranes may be all that is necessary to control the hemorrhage. At times this is not sufficient and in spite of the ruptured membranes the bleeding continues. The insertion of a colpeurynter, usually of the Voorhee's type, is indicated. The rubber bag should be large enough to control the hemorrhage, and in passing it there should be sufficient dilation of the cervix to allow for immediate delivery if necessary.

If a part of the os is covered by placenta, then we are dealing with a **partial placenta praevia**. These cases may bleed considerably, and the patient may be fairly exsanguinated on her entrance to the hospital. If the patient is in good condition, if she has lost little blood, if the cervix is soft and effaced and easily admits the examining finger, and if there is no contra-indication to delivery through the natural passages, then again simple rupture of the membranes with the introduction of a bag will suffice to control the bleeding and to initiate labor. On the other hand, if a good portion of the os is covered by placenta, or the patient has lost considerable blood, or other borderline indications for abdominal delivery exist, a cesarean section may prove to be the treatment of choice.

If the entire os is covered by placenta, we are dealing with a **total placenta praevia**. This is the most serious type. Immediate cesarean section offers the best prognosis for the mother and is still the simplest treatment for this serious condition. From the foregoing it may be seen that in the individual treatment of placenta praevia it is necessary to examine the patient carefully. Occasionally this vaginal examination provokes a sudden alarming hemorrhage and a temporary vaginal pack may have to be used to control it long enough to complete the

cesarean section. The suddenness of the hemorrhage at times makes it necessary to have all preparations for laparotomy and the treatment of complications in readiness. This brings out the importance of having a donor available before the examination is made.

If it is desired to deliver the patient from below, she should be carefully observed during the entire labor. As soon as the bag has passed through the cervix it should be removed so that no blood is allowed to accumulate behind it. The delivery can be allowed to take place spontaneously if there is no alarming bleeding, or it can be completed rapidly by version and extraction or forceps, depending on the existing conditions. Suffice it to say that operative manipulations should be carried out with the utmost gentleness in order to minimize the trauma which may be extensive in cases of placenta praevia.

The treatment of the third stage likewise demands considerable attention. Serious postpartum hemorrhage can result. If the placenta does not separate quickly and completely, it should be removed manually. When there is bleeding following the removal of the placenta, one should immediately inspect the lower uterine segment for lacerations, and if none is found the entire uterus and vagina should be carefully tamponaded. Pituiturin and ergotrate given intravenously are useful in controlling the hemorrhage.

Braxton Hick's version should be used only in dead or non-viable babies where the other methods of treatment are not available. After rupture of the membranes a leg is brought through the cervix, thereby allowing the buttocks to act as a tampon against the placenta. Technically, it is a difficult procedure and should be reserved for emergencies. A simpler method for such a case in an emergency is to grasp the fetal scalp by a very heavy tenaculum forcep. Gentle traction can then be made so as to control the bleeding. This method should be feasible for treatment of a patient when hospital facilities are not available. Vaginal packs are of little use and materially increase the hazard of infection.

As in the case of placenta praevia, the treatment of abruptio placentae should be individualized and will depend upon the conditions met with in the patient. The partial separations, or the mild cases, most often occur in labor. The labor is often accentuated by the abnormally strong uterine contractions. These cases can be treated conservatively and labor allowed to

terminate as nearly spontaneously as possible. One should carefully follow the patient's condition, noting the amount of bleeding, the possibility of concealed hemorrhage, the character of the labor pains, the blood pressure and the state of the fetus. Gradual increasing asphyxia on the part of the baby characterized by increasing irregularity of rhythm or slowing of the fetal heart rate may mean an increase in the extent of the separation. If the membranes are intact they should be ruptured to make internal bleeding less likely, to facilitate the labor, and to permit a closer adaptation of the uterus about the baby, thereby decreasing the possibility of hemorrhage. Tumultuous pains can be temporized by administering some anesthesia with the pains, such as ether or ethylene and oxygen. As soon as the labor can be terminated with safety to the mother and to the baby this should be done by the most conservative means. Immediately on the birth of the baby, the mother should receive a cubic centimeter of pituiturin. One need not hesitate to terminate the third stage promptly by a manual removal of the placenta if the hemorrhage becomes at all alarming.

In the complete separation or the serious cases, if the patient is in labor and is making normal progress, conservative measures may suffice. Rupture of the bag of waters and the temporary dislodgment of the presenting part to rule out the possibility of concealed hemorrhage, may be all that is necessary. The baby is most often dead and needs no consideration. Small doses of pituiturin intramuscularly may hasten the labor and lessen the bleeding. As soon as there is sufficient dilatation the labor may be most expeditiously terminated for forceps, or craniotomy, depending on the existing conditions.

In the patients who are not in labor, the fulminating cases who enter in shock, the patients in whom labor does not progress satisfactorily and rapidly, in the patients in whom a toxemic uteroplacental apoplexy can be diagnosed, abdominal delivery offers the best results in the hands of those experienced to do major surgery provided proper facilities are at hand. A rapid cesarean section, preferably the low, cervical type, or laparotrachelotomy, and if at all possible local anesthesia, terminating the labor most rapidly and most satisfactorily is the procedure of choice. The advisability of a hysterectomy will depend on the ability of the uterine musculature to contract down and control the bleeding.

Whenever there is any doubt as to this ability on the part of the uterus to take hold of the situation it had better be sacrificed. While it is not always proper to do a hysterectomy in all cases of uteroplacental apoplexy, it is very often necessary.

Timely treatment is most important in this grave condition. To wait until a patient is exsanguinated and then decide on radical surgery is not fair to the patient or to the method of delivery. The diagnosis of the gravity of the situation must be made early and the treatment instituted early. Every surgeon knows that to operate upon patients in shock is bad practice. Patients who enter in shock must be rapidly prepared before radical surgery is resorted to. The use of liberal blood transfusions, repeated before and after operation if necessary, is the most important single measure in the treatment of serious cases. Glucose and saline intravenously and subcutaneously, and morphine will help to bring the patient out of shock and improve her operative risk.

The third stage is the most serious stage in the entire labor. Even a mild postpartum hemorrhage occurring in a woman who is already exsanguinated may be the deciding factor. Furthermore, it has been noted that patients with even the mild or partial separations have a tendency to postpartum hemorrhage as a result of an abnormal mechanism in the third stage. Everything should be in readiness for manual removal of the placenta and uterine tamponade. If there is an unusual amount of bleeding following the delivery of the baby and the placenta does not respond to Crede's expression, it should be removed manually. Invasion of the uterus is not entirely without risk but is definitely the lesser of two evils. The uterine cavity should be thoroughly explored and all clots removed. Brisk massage, ergotrate intravenously and pituiturin intramuscularly may be sufficient stimulation to cause the uterus to contract firmly. However, if it has a tendency to remain flabby or if the bleeding continues and it is due to uterine relaxation and not to birth injuries, tamponade should be immediately instituted. The proper packing of the uterine cavity is very important because it is extremely dangerous when the packing acts as a uterine plug allowing the bleeding to go on behind it. If firm packing does not control the bleeding it may mean that an error has been made in the diagnosis and that the uterine musculature is probably distintegrated beyond recovery. Under these conditions a

blood transfusion followed by a rapid hysterectomy may still save the patient.

It cannot be too strongly emphasized that measures for combatting blood loss are a most essential part of any treatment of hemorrhage in pregnancy. The subsequent maternal mortality, serious puerperal infection, and prolonged convalescence and invalidism can be greatly reduced by a serious attempt to restore in some measure the blood loss of the patient. For maintaining blood volume, saline or Ringer's solution can be given by hypodermoclysis, using 16 gauge needles. Glucose solution in 20 per cent concentration should be given intravenously at as slow a rate as possible, discontinuing its administration just as soon as blood is available. Not less than 500 c.c. of the solution should be given unless a liberal blood transfusion follows. It must be remembered that large amounts of hypertonic glucose solution draws liberally on the fluids in the tissues and decreases blood coagulation time. Although the blood volume be restored, sufficient circulating hemoglobin must be present to carry on the vital functions of life. The amount of the transfusions should depend on the blood loss, averaging 600 to 800 c.c. in the usual case. Dieckmann and Daily report that in 22 cases in which the blood loss was measured it averaged 824 c.c. and these patients received a total of 29 transfusions, averaging 670 c.c. of blood per patient.

CORRESPONDENCE

Dear Dr. Brooksher:

Reporting from Columbia county, the Oil Center of Arkansas and a rejuvenated Medical Center with a New City Hospital, new Clinic and new officers for the year.

The Columbia Society met in regular dinner session Feb. 9, 1940, in the home of Dr. T. H. Jones at the expense of the Waldo doctors who served luxuriously twelve hungry physicians and several guests. Dr. A. S. Buchanan gave a speech on "Socialized Medicine."

After the dinner and address the society elected the following officers:

President, Joe F. Rushton; Vice-president, T. H. Jones; and Secretary-treasurer, John H. Wilson.

Wishing you and our state society a prosperous year, I am,

Fraternally yours,
John H. Wilson.

ACIFORM TREATMENT OF RHEUMATIC DISORDERS*

FRANCIS J. SCULLY, M. D.

Hot Springs National Park

Any physician who has treated many cases of chronic rheumatic disorders comes to realize that there are cases in which all measures seem to be of no value, that regardless of the treatment given they may remain uncomfortable and unimproved. It is these cases that stimulate the physician to try new measures, to develop new methods, and to attempt new procedures with the hope of bringing relief to this unfortunate group.

Last fall I had an opportunity of seeing the results of a new treatment for arthritis, both in private patients and in a large government hospital. This work was carried out under the direction of Dr. L. Mayers and Dr. S. K. Livingston¹, who have recently given a preliminary report of their cases. The results were so uniformly successful and often so spectacular in the quick relief that was brought about that I obtained a supply of the preparation and have since used it in a number of cases in my practice.

The preparation, Aciform II, was developed ten years ago by Dr. Lyss of Biel, Switzerland. It is a combination of iodine, sulphur and formic acid, together with a terpene. All of these drugs have been used in rheumatic disorders for a long time but the three combined with the terpene gave a new type of preparation which has proven to be of unusual value.

Extensive experiments as well as the studies in Europe by Drs. Erlsbacher and Burger² have shown aciform to be without any dangerous reaction. It can be injected directly into all of the tissues of the body, including the nerve trunks without damage or deleterious effects. The usual dose is from 1/2 cc. to 5 cc. Single injections of from 1/2 to 2 cc. are generally injected into a given area, but several such injections may be given along the nerve trunks or about the affected joint. No complications have been noted from doses as large as 20 cc.

As a general rule it has been found best to inject aciform in the area of the greatest tenderness about the joint or nerve trunk, or in the area showing muscle spasm. When the pain is generalized in the arm or leg the injection may be given about the main nerve supply to that part. The

* Read before the Sixty-fourth Annual Session, Arkansas Medical Society, Hot Springs National Park, May 8, 1939.

injection is never given into the joint cavity but is given subcutaneously or into the tissues about the joint. The injection is given quickly with a firm pressure applied for a few seconds after withdrawal of the needle.

Immediately following the injection there is a burning sensation lasting 30 to 60 seconds, followed by a feeling of numbness or fullness in that area. Aciform is not an anesthetic but in most cases the pain begins to subside quickly after the injection. In many cases the relief from pain is striking and the patient will leave the office stating that he is feeling better. The relief may be temporary at first but with the injections repeated at intervals of 3 to 7 days more lasting benefit is obtained.

The therapeutic action is evidently due to an increase in local circulation, brought about by the tissue reaction to the injection of this formic acid preparation. The increased circulation brings better nutrition to the affected tissues and builds up their resistance. As the reaction subsides the waste products and toxins are carried away. With repeated injections there is a more normal circulation which gives an opportunity for healing and repair to take place. Thickened tissues about the joints, nerve trunks and muscle sheaths are reduced and freer movement of the affected parts is brought about. Earlier and more active use of the joints is thus favored because of the reduction of the thickening of the tissues about the joints and the relief from pain. This limits the wasting of the muscles from disuse and helps to prevent deformity. The increase in local circulation also allows increased effects from other drugs, such as iodides, which may be employed along with this type of therapy.

Nineteen cases of arthritis were treated. The more acute cases responded much better than the chronic cases. Chronic atrophic arthritis showed a little more complete recovery than the chronic hypertrophic group, probably because there were no bony deposits and less erosion of the joint surfaces. The one case of hypertrophic arthritis which did not show any improvement exhibited marked joint deformity, much wasting of the muscles and impairment of circulation.

The cases showing complete recovery had relief from pain, soreness and stiffness as well as a return of the joint to normal size. Those showing marked improvement had relief from pain and soreness but still had a little stiffness left. Those showing slight improvement had reduced swelling and better use of the joints, but continued to have some discomfort. The knees, ankles and wrists were more amenable to treatment than the hips and shoulders, probably because they were more accessible to the injections. The following case exhibited a favorable response to this type of therapy:

Case 1. Housewife, age 45 years, was seen November 7th, complaining of soreness and stiffness of both knees which had been present for two years. During acute exacerbations of the disease she had also had some involvement of the left elbow and the middle joints of the fingers. The tonsils had been removed in childhood.

Physical examination showed tenderness and some thickening about both knees, especially on the inner side. There was a little limitation of movement. There was also some residual thickening of the middle joints of the fingers of both hands. X-ray showed a slight narrowing of the joint space in the right knee, but no other changes were noted. A blood count showed 85% hemoglobin, 4,330,000 red cells, 6000 white cells. Blood sedimentation rate was 16 millimeters for the first hour. A diagnosis of chronic atrophic arthritis was made.

Previous treatment had consisted of massage, a few baths, and injections of gold sodium thiosulphate and vaccines, with temporary improvement. She had also been given some ovarian and thyroid gland tablets.

Aciform therapy was started on November 8th. She was given an injection each two or three days. Divided doses of 1 to 2 cc. each were given about both knees. In addition she had the Hot Springs baths, aspirin for the relief of pain, and two injections of sodium iodide intravenously each week. Treatment was discontinued on December 14th as the knees were free from soreness and swelling.

Thirteen cases of neuritis were treated. This type of rheumatic disorder responded a little more readily to the aciform therapy than the arthritis. Even in cases which showed only slight ultimate recovery there were periods of marked and complete relief following the injections. The one case of sciatic neuritis which obtained no benefit from the treatments cleared up after the

Number of Patients	Diagnosis	Number of Injections	Complete Recovery	Marked Improvement	Slight Improvement	No Improvement
19	Arthritis:					
	Acute Infectious	4 2-10	1	2	1	
	Chronic Atrophic	6 2-32	1	3	2	
	Chronic Hypertrophic	9 2-12	1	4	3	1
13	Neuritis:					
	Brachial	8 1-11	3	3	2	
	Sciatic	4 2-7		2	1	1
	Trigeminal	1 2			1	
7	Lumbago	1-15	5		1	1
1	Torticollis	5				1
40	Totals		11	14	11	4
Percentage			27.5	35	27.5	10

removal of two abscessed teeth. Nerve trunk tenderness was easier to elicit and the injections were more easily made than into the thickened joint tissues.

The following case showed a favorable response to this type of therapy:

Case 2. Housewife, age 54 years, was seen on October 24th, complaining of pain in right shoulder which had followed an auto accident with bruising of the right shoulder three years ago.

Examination showed tenderness over the right shoulder and arm, along the distribution of the right supra-scapular nerve and the musculo-spiral nerve.

Aciform therapy was started on October 27th and injections were given every other day until November 12th. The injections were given over the supra-scapular nerve and along the course of the musculo-spiral nerve. In addition the patient had the Hot Springs baths and two intravenous injections of sodium iodide each week.

There was complete recovery which has continued, according to a recent report from the patient.

Seven cases of lumbago were treated with good results. The diagnosis of lumbago was made in cases with a painful back only after x-ray had excluded arthritis of the spine and sacro-iliac joints. These cases exhibited marked muscular spasm of the lumbar muscles with restricted movement, tenderness to pressure and pain on attempted movement. Good results were obtained in all of the cases except one, which had been of long duration and had resisted all types of physio-therapy, medication and injections over a period of three years. The most striking results were obtained in this condition. Often one injection was sufficient to give complete relief. The following case showed such a response:

Case 3. Housewife, age 60 years, was seen on November 2nd, complaining of pain and stiffness in the lumbar region, extending down the right hip, which came on rather suddenly two days before after lifting.

Examination showed the lumbar muscles rigid and tender to pressure, most marked on the right side. X-ray showed no arthritis.

A single injection of 2 cc. of aciform was given into the right lumbar region over the point of greatest tenderness. There was immediate relief from pain and the patient was able to walk out of the office erect and without discomfort. She reported a little soreness the next day but no further difficulty after that.

One case of spasmodic torticollis was given five injections about the spinal accessory nerve and into the thickened body of the sterno-mastoid muscle, without relief.

Results in these forty cases compare favorably with the results obtained by Drs. Mayers and Livingston in their series of 105 cases. They reported 32.3% showing complete recovery, 42.8% showing marked improvement, 19%

showing only slight improvement and in 6.7% negative results were obtained.

Practically all of my cases received some additional therapy. All had the Hot Springs baths with hot packs to the affected areas. Aspirin was given for the relief of pain and in cases showing much thickening about the joints and nerve trunks sodium iodide was given intravenously. With the increased local circulation brought about by the aciform injections it was felt that the iodide would be more effective and the results obtained in these cases would seem to bear out that impression.

In this series the patients were under observation and treatment for a limited time. As a rule, the longer the injections were kept up the better the results that were obtained. Those receiving only one or two injections and then discontinuing the aciform therapy on account of pain or fear of the injections did not obtain the results of those who were more cooperative and willing to keep up the treatment for an extended period. In the cases having ten or more injections there was noted a general improvement in health and a better sense of well being, as well as relief from the local condition.

This treatment can be given along with other therapeutic measures without ill effects. The treatment has proven safe and without dangerous reaction. It can be continued over a long period of time without untoward effects. The treatment is easily handled and does not require any complicated equipment.

This therapy is not intended to take the place of all other therapeutic measures. It is still necessary to study the patient, observe the diet, look after elimination, to remove foci of infection and to recommend such measures as will build up the patient's general resistance. It is by no means a panacea for all types of arthritis, but it is an effective addition to our other types of treatment in these cases.

BIBLIOGRAPHY

- ¹ Mayers, L. H., and Livingston, S. K.: The Treatment of Arthritis. *Industrial Medicine* 8: (Feb.) 1939.
- ² Erlsbacher, O., and Burger, A.: The Treatment of Myalgic—Neuralgic Conditions with Formic Acid Injections. *Med. Klinik.* No. 48—1937.

COMING MEDICAL MEETINGS

Medical Association of the Missouri Pacific Railroad, New Orleans, March 28-30th.

Arkansas Medical Society, Fort Smith, April 15-17th, 1940.

American Medical Association, New York, June 10-14th, 1940.

Region II, American Academy of Pediatrics, Edgewater Park, Mississippi, March 15-16, 1940.

BASIC SCIENCE DECISION OF THE SUPREME COURT

Peter A. Deisch

The original suit to test the Basic science law was against the chiropractic board of examiners, to restrain them from giving examinations before the applicant had procured a certificate of competency in the basic sciences, and against 2 individual chiropractors, who had been issued such licenses. The chiropractic board was ignoring the law and it was necessary that there should be a final decision as to its validity.

The Supreme Court held on January 15th, that the contention of the chiropractors that the subjects in which an examination is required by said act are not requisite, necessary nor connected with such practise, is not sound, but are on the contrary reasonable and necessary.

The chiropractors contended that "such subjects as bacteriology and pathology were not essential to, were not permitted and were not related to or connected with that practise."

The Supreme Court declared "The legislature thought it proper that all persons seeking license to practise the healing art should have a knowledge of these subjects, and we cannot say that their inclusion as to chiropractic was unreasonable, arbitrary and without any relation to such practise."

"It is said that a chiropractic does not treat diseases, and therefore pathology has no relation. If he does not treat diseases, what does he treat? Does he manipulate the vertebra of a well person just for the pleasure of such well person? There would be no excuse for any regulatory chiropractic laws, if they were not engaged in treating disease."

"The Basic science act uses the words 'treat—any human pain, injury, disease' and we are therefore of the opinion that said act applies to appellees and that persons practising chiropractic are engaged in the practise of the healing art, as defined in said act, and that applicants for license must take the examination before the Basic science board of examiners, before they are eligible for examination before the chiropractic board."

"The Basic science act does not repeal, amend or modify any pre-existing law relating to examination of applicants to practise the healing art, but is an additional requirement, a prerequisite to be complied with before taking such examina-

tions. These laws remain in full force and effect, but with the super-imposed requirements of said act." * * *

"Nor can we say that because dentists and others are excepted from the provisions of the act, the legislature made an arbitrary classification of those to whom it applies and excluded others of the same class. Acts of the legislature are presumed to be valid, and they will not be stricken down unless contrary to some express or necessarily implied provision of the constitution."

On February 5th, new counsel, consisting of the firm of Rowell, Rowell & Dickey of Pine Bluff, and Mr. Chas. Garner of Little Rock, filed a motion in the Supreme Court, setting forth that they represented 7 chiropractors, who were not parties to the original suit, and that as it was a class action (applied to all the chiropractors in the state) and their rights had therefore been determined, that they had a right to be heard, and they wanted to present facts different from those brought out before Chancellor Dodge in the original suit.

The Supreme Court denied their motion, and held that they could file a brief on the points covered in the original suit, but only on condition that they obtain the permission of the attorneys who appeared in the original suit, who were former Justice W. R. Donham and Mr. Rodney Parham, of Little Rock.

The chiropractors have filed a petition for a rehearing, but we are absolutely confident that it will be denied, and that the opinion will be permitted to stand as it now is.

PROPOSED AMENDMENT TO THE BY-LAWS

The following amendment to the By-Laws was presented to the Sixty-fourth Annual Session of the Society at Hot Springs National Park, May 10th, 1939, and is published here in accordance with the constitutional provision which requires its publication in The Journal on two occasions.

Chapter VIII, Section 2: To amend the first sentence which reads: "The Committee on Scientific Work shall consist of three members of which the Secretary shall be one," by deleting the word "one" and substituting therefor, the word, "Chairman."

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE value of the tuberculin test as a means of finding cases of tuberculosis by mass testing has lately been questioned. At the last annual meeting of the National Tuberculosis Association a symposium on the tuberculin test and X-ray was presented. One of the speakers summarized the values and limitations of the tuberculin test in a paper, from which these abstracts are derived.

VALUE AND LIMITATIONS OF THE TUBERCULIN TEST

The queries and doubts concerning the tuberculin test that have arisen within the last two years have had a healthy effect on our anti-tuberculosis campaign in forcing us to review our current procedures and test the validity of past beliefs. This paper omits all discussion of the tuberculin test except as a means for finding cases of tuberculosis.

In guinea pigs the test is practically infallible. The success of the campaign for eradication of bovine tuberculosis, based, as it is, on the tuberculin test, is a strong empiric argument for the practical value of the test. The almost constant finding of tuberculous lesions in cattle slaughtered because of a positive tuberculin reaction, and the failure to find tuberculosis in the routine inspection of millions of cattle not reacting and killed for meat production, is tangible evidence for its specificity and adequacy. In certain other animals, however, tuberculin allergy is far less conspicuous.

Tuberculin sensitivity in man can never be studied with the same thoroughness as in guinea pigs or cattle. However, observations on children vaccinated with BCG have enabled us to study the results of artificial infection and its relation to tuberculin sensitivity and these studies indicate that after very mild infection an overwhelming majority of children become tuberculin-positive.

We are here not concerned with the total number of tuberculin reactors that may be detected, but rather with the detection of significant tuberculosis by the use of the tuberculin reaction as a preliminary screen. ("Significant tuberculosis" or "a case of tuberculosis" in its pub-

lic health sense, is restricted to infection with the tubercle bacillus which has proceeded to the point where it has produced symptoms recognized as those of clinical tuberculosis, or has brought about changes demonstrated by X-ray examination that are considered to indicate tuberculous disease.) This definition places heavy responsibility on X-ray examination. If the tuberculin test is used at all in case-finding, it is as a screen to obviate the necessity of the more expensive X-ray examination. (In young adult groups, one-third or more of those tested with tuberculin may not react, and these need not be X-rayed.) It is believed by some that, on the basis of cost alone, saving X-ray examination of one-third of the subjects would not counterbalance the cost of the tuberculin test.

What does the standard first and second dose method of tuberculin testing (fully defined by the author) detect and overlook? Of 610 cases of pulmonary tuberculosis diagnosed in the Henry Phipps Institute during 5 consecutive years, all but one reacted to tuberculin. Among the 609 reactors, 94% of the white, and 96% of the colored reacted to the first (minimal) dose. (O. T. used in earlier, P.P.D. in later years). However, in other similar clinics and in hospitals attention is drawn occasionally to cases of unquestioned tuberculosis, even with positive sputum, in which the reaction is negative. Explanations for these exceptions are easily found; the fact remains that cases of anergy in typical hospital patients are probably few.

However, clinic experience is not representative of the conditions of case-finding as they occur in mass surveys; some surveys deal with

groups of high and others with low infection incidence. Evidence shows that the tuberculin test is an efficient preliminary case-finding measure in groups under relatively heavy exposure, as nurses in a hospital or sanatorium. For example, among 400 nurses, 22 "cases" of tuberculosis have occurred, all of which developed or already exhibited tuberculin sensitivity some months in advance of the onset of a recognized lesion, and no case has developed in the absence of tuberculin sensitivity. In groups under exceptional exposure the tuberculin test is an effective warning sign indicating the need of close and frequent observation.

Studies conducted by the United States Public Health Service and the Department of Health of Tennessee have shown that the tuberculin test is far from being the sharp indicator, once popularly supposed, of previous simply tuberculous infection. These studies disclosed a large amount of what appears to be healed primary tuberculosis in people not reacting to tuberculin. A supplementary survey conducted at Hagerstown, Maryland, however, indicated that for case-finding purposes the tuberculin test is highly effective. In the 1,000 subjects examined by both tuberculin test and X-ray, 13 cases of tuberculosis were discovered, all but one of which reacted to tuberculin, and this case was of scarred apical disease of slight extent and apparently long arrested. The author believes that an accuracy of about 90 to 95 per cent may be expected of the tuberculin test as a means of selecting subjects for examination by X-ray, but admits that a loss of 5 to 10 per cent is serious, but perhaps inevitable.

Limitations of the Tuberculin Test

The attempt to divide all mankind into two groups, infected and not infected, is futile and probably responsible for most of the present confusion. Two other groups must be recognized: (1) those infected, not yet positive, but to be positive shortly thereafter, and (2) those infected and previously positive, but now negative. (A possible fifth group would include those who are infected and never develop a positive reaction.)

Allergy does not develop simultaneously with infection. There may be an interval of from 2 to 3 weeks between infection and a positive tuberculin reaction. In any large survey there may be a few cases recently infected and not tuberculin-positive. In some of these, X-ray lesions may develop.

The second group (previously positive, now negative) is more important; probably the greatest single cause for our present confusion. We have tended to overlook the fact that with the arrest and healing of tuberculous lesions allergy wanes and finally may disappear.

In a period, however, when the mortality rate is dropping steadily, and the morbidity rate is following in some proportionate relationship, and when in addition an improved control of tuberculosis is bringing about a steadily increasing isolation of patients with open lesions, it is only to be expected that reinfection, the rule in the past, will become progressively less frequent. The infections that formerly constantly restored a waning allergy will be far less frequent in the future and we may look forward to the time when loss of allergy will be as common as its maintenance.

A study of 2,490 positive reactors, all examined at the Henry Phipps Institute, showed that 276, or approximately 11% became negative, either transiently or for the balance of the period of observation. It was disclosed also that the stronger the original reaction the less frequently it reverted to negative, and vice versa. Further, the correlation with exposure was equally striking. In 58% of the families in which no tuberculosis was present, the tuberculin reaction became negative in some member of the family, while in families where there was continuously a member with sputum-positive tuberculosis, allergy disappeared in some member of the household in only 8% of the families.

The fact that allergy tends to disappear where there is no exposure, and has more and more tendency to remain as exposure is presumably more frequent, suggests strongly that reinfection is responsible for the maintenance of the positive reaction. The epidemiological significance of this fact is obvious.

In the 276 cases in which the reaction became negative, no abnormality was detected in the film in 94% and there were no cases of active reinfection type tuberculosis in the entire group. In 10 cases with what were read as calcified lesions, the reaction became negative.

Two cases are recorded in which tuberculin-negative children with calcified lesions became tuberculin-positive coincidentally with the development of fresh, active tuberculosis.

The Tuberculin Test, Its Value and Its Limitations, Esmond R. Long, M.D., *Amer. Rev. of Tuber.*, Vol. XL, No. 6, Dec., 1939.

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EDITORIAL

INSTRUCTOR IN OBSTETRICS

The Committee on Maternal and Child Welfare of the Society is working on plans with the cooperation of the Arkansas State Board of Health to provide a full-time instructor in obstetrics for the medical profession of the state. At its meeting, October 25th, 1939, the Council authorized the Committee to proceed and to present its completed plan to the House of Delegates of the Society at the Fort Smith meeting. The State Board of Health has indicated that it is now ready to add such a physician to its staff upon completion of arrangements and with the approval of the Society.

The obstetrical instructor will be a full-time member of the staff of the State Health Department

and will receive no fees or compensation from any source other than that paid through the State Health Department. He will be sent for a period of from one to four months or longer, if necessary, to various centers of the state until he has covered the entire state. While in each center he will be available to the physicians of that area (city, county or district) for free obstetrical consultation and aid. Any licensed physician will be entitled to call him to see and help in any case they wish, private or charity, prenatal, during delivery, or in the post-partum period. If desired by the physicians of the given locality, he will arrange for group meetings and make talks, give demonstrations, and exhibit motion pictures bearing upon obstetrical practice. Should this physician not be used sufficiently, he will be expected to spend the remainder of his time in the county health unit giving prenatal examinations to midwife cases.

EDITORIAL COMMENT

ANOTHER QUESTIONNAIRE

An altruistic (?) publisher has recently circularized, for the second time within a few months, the medical profession, on this occasion asking for expert opinion on soap. Six brands are listed and the physician is asked to check the ones which meet "scientific standards." Just what scientific standards is not stated. In another paragraph of the letter the "standards" are referred to as those which doctors require of a soap for bathing babies. Do you honestly feel that you can answer this sort of a questionnaire, which is, in effect, signing a blank check? Your name, of course, will not be used—that is a familiar sound! Yet do not be surprised when you read in the advertising columns at some future date that "whoozis soap" has been endorsed by umpteen-thousand doctors, who ought to know. Do they?

For many a day we have sought a solution to this questionnaire problem. May be we have it. Just seal up that addressed envelope, empty, mail it back. If 100,000 doctors would send back empty envelopes, costing the quizzer four cents each when returned, all empty, it might change the entire aspect of the questionnaire industry. Let's try it!

THE 1940 CENSUS

The assistance of physicians is needed to insure the completeness of the Sixteenth Decennial Census, as is that of every citizen. The 1940

census will give a composite picture of the many affairs of the American nation and its people. The medical profession is especially concerned with health conditions as they will be revealed by the census. Census figures make it possible to compare the vital statistics of years past with those of today and thus enable physicians and health authorities to determine the how and why of the deadlier diseases.

THE FORT SMITH SESSION

With an exceptionally good program arranged and the Sebastian County Medical Society working toward entertainment and other details, all promises that the 65th annual session of the Society in Fort Smith April 15th, 16th and 17th will be one which you will not want to miss. Guest speakers are Meyer Weiner, Saint Louis; I. H. Lockwood, Kansas City; Clifford Barborka, Chicago; W. P. Sadler, Minneapolis; J. Jay Keegan, Omaha; John H. Connell, New Orleans, and E. H. Skinner, Kansas City. There will be fourteen essayists from the state society. The Goldman Hotel will be headquarters and you are urged to make an early reservation.

A TRIBUTE TO OUR DOCTORS

MRS. H. T. SMITH
McGehee

We are well informed about histories of soldiers, sailors, kings and statesmen; inventors and discoverers, saints and craftsmen, who have changed our destinies, but omit the struggles of the medical profession in the unwearied pace, unknown and sunsung, to make human living safe, so during the month of March, throughout the State the Auxiliary to the Arkansas Medical Society will pay tribute to all physicians by the observance of "Doctors' Day."

No amount of time given would be adequate to pay fitting tribute to the "Doctors of Yesterday and Today," to all those men who, throughout the years, have served their fellowmen, sacrificing their own comfort, meeting the hard problems of their lives and those of their people with cool heads and stout hearts, lessening the suffering, they could not prevent, standing with their friends to face the death they could not stay.

To all the members of the medical profession we here pay grateful tribute, as they go about daily doing good. We are proud of everyone of them as we say, "The skill of the physician shall lift up his head and in the sight of great men, he shall be in great admiration."

PROCEEDINGS OF SOCIETIES

The Polk County Medical Society has elected the following officers: President, F. A. Lee, Vandervoort; Vice-President, Pierre Redman, Mena; Secretary-treasurer, J. G. Hilton, Mena; Delegate, B. H. Hawkins, Mena; Alternate, H. G. Heller, and Councilor, J. B. Murphy, Opal.

The Benton County Medical Society met in dinner session at Siloam Springs February 8th for the following program: "The Knee," S. A. Grantham, Jr., and "Bronchoscope or Sinus," W. L. Post.

Geo. M. Love, Secretary.

Cleveland County Medical Society has elected the following officers: President, T. L. Adams; Vice-president, A. B. Robertson; Secretary-treasurer, W. G. Hancock; Delegate, A. B. Robertson, and Alternate, W. G. Hancock.

At a meeting of the Council January 24th, F. A. Corn, Jr., Lonoke, was elected to fill the unexpired term of the late Val Parmley as Councilor from the Eighth District and R. B. Robins, Camden, was elected Chairman of the Council.

Greene County Medical Society has elected the following officers: President, W. M. Majors; First Vice-president, C. A. Hardesty; Second Vice-president, J. A. Dillman; Secretary-treasurer, Earle D. McKelvey; Delegate, R. J. Haley, Jr., and Alternate, W. M. Lamb.

Drew County Medical Society has elected the following officers: President, J. S. Wilson; Vice-president, J. P. Price; Secretary-treasurer, B. Z. Binns; Delegate, J. S. Wilson, and Alternate, J. P. Price.

The physicians of Lake Village recently entertained the members of the Chicot County Medical Society with a dinner at the Lake Village Infirmary.

Grant County Medical Society has elected the following officers: President, Robert M. Kelly; Secretary-treasurer, Miles F. Kelly.

White County Medical Society has elected the following officers: President, J. R. Sloan, Garner; Vice-president, D. W. Sloan, Beebe; Secretary-treasurer, S. J. Allbright, Searcy; Delegate, S. J. Allbright, and Alternate, D. W. Sloan, Beebe.

The Desha County Medical Society has elected the following officers: President, H. A. Rands, Dumas; Secretary-treasurer, Gibbs Biscoe, Dumas; Delegate, J. H. Hellums, Dumas.

Carroll County Medical Society has elected the following officers: President, A. L. Carter, Berryville; Vice-president, J. F. John, Eureka Springs; Secretary-treasurer, W. H. Newkirk, Berryville; Delegate, J. F. John, and Alternate, D. K. McCurry, Green Forest.

The Sebastian County Medical Society was addressed February 13th by Roger Hillard, "Laboratory Studies in Tuberculosis with an Evaluation of the Blood Sedimentation Test," and A. B. Dickey, "A Discussion of Intrapleural Pneumolysis," both speakers of State Sanatorium.

Ralph E. Weddington, Secretary.

Lonoke County Medical Society has elected the following officers: President, S. A. Southall, Lonoke; Vice-president, E. S. Whaley, Carlisle; Secretary-treasurer, O. D. Ward, England; Delegate, J. F. Brewer, Kerr, and Alternate, E. A. Callahan, Carlisle.

The Craighead-Poinsett County Medical Society met February 1st for the following program: "Indications for Tonsillectomy," O. T. Cohen, and "Use of Sulfanilamide," W. C. Overstreet. The following officers have been elected: President, R. C. Shanlever; Secretary-treasurer, M. L. Cantrell; Delegates, W. W. Verser and Ralph M. Sloan, and Alternates, W. C. Overstreet, M. E. Blanton and M. L. Cantrell.

M. L. Cantrell, Secretary.

Howard-Pike County Medical Society has elected the following officers: President, J. S. Hopkins, Nashville; Vice-president, M. D. Duncan, Murfreesboro; Secretary-treasurer, H. H. Holt, Nashville; Delegate, Wm. M. Gibson, Nashville, and Alternate, T. J. Holcomb, Mineral Springs.

The Pulaski County Medical Society was addressed February 19th by R. B. Robins, Camden, "The Climateric in Men," and Carl A. Rosenbaum, Little Rock, "Liver Functions in Surgical Diseases."

E. H. White, Secretary.

St. Francis County Medical Society has elected the following officers: President, J. O. Rush, Forrest City; Vice-president, H. L. McLendon, Palestine; Secretary-treasurer, Paul S. Lanier, Round Pond; Delegate, J. O. Rush, Forrest City, and Alternate, C. V. Powell, Forrest City.

The Lawrence County Medical Society has elected the following officers: President, J. F. Jackson; Vice-president, T. Z. Johnson; Secretary-treasurer, T. C. Guthrie; Delegate, J. C. Hughes, and Alternate, J. C. Land.

Ashley County Medical Society has elected the following officers: President, G. W. Fletcher, Montrose; Secretary-treasurer, J. T. Herron, Hamburg; Delegate, M. C. Crandall, Wilmot, and Alternate, J. T. Herron.

CORRESPONDENCE

January 22nd, 1940.

Dear Doctor Brooksher:

Please extend my personal thanks to the Arkansas Medical Society for the lovely spray of red roses and white chrysanthemums sent in memory of Val.

Sincerely,

Jo Parmley.

PERSONALS AND NEWS ITEMS

James F. Lewis addressed the Fayetteville Kiwanis Club recently.

Paul Stroud, Jonesboro, is taking special work in pediatrics at Tulane University.

R. E. Schirmer recently addressed the Blytheville Kiwanis Club on the work of the state health department.

C. A. Archer addressed the DeQueen Rotary Club recently on the prevention of disease.

Elizabeth Fletcher recently conducted a psychiatric clinic at the State Hospital for students from Henderson State Teacher's College.

J. W. Harper, El Dorado, has recovered from an appendectomy.

L. L. Fatherree, J. A. Summers and H. G. Hollenberg have been selected as members of the Pulaski County Chapter of the National Foundation for Infantile Paralysis.

M. E. Rust, formerly of Pawhuska, Oklahoma, has located in Harrison.

D. W. Fulmer has moved from Hot Springs National Park to Little Rock.

A. F. Hoge, Fort Smith, recently visited in San Antonio.

W. B. Grayson and A. M. Washburn, Little Rock, recently attended a conference of Southern health officials in Atlanta.

M. C. Hawkins, Jr., addressed the Searcy schools recently on "Social Hygiene."

H. G. Heller, Mena, took postgraduate work in proctology at Cook County Hospital, Chicago, recently.

J. M. Matthews of Morrilton has accepted appointment as physician to the C. C. C. camp at Cass.

E. C. Moulton has been elected a director of the Arkansas Valley Trust Company at Fort Smith.

R. L. Smith has been elected second vice-president of the Matthews Investment Company at Russellville.

BORN—On January 21st, a daughter, to Dr. and Mrs. W. F. Adams, Fort Smith.

"Underwater or Pool Therapy of Certain Conditions of Muscles, Nerves and Joints," by Geo. B. Fletcher, Hot Springs National Park, appeared in the January Tri-State Medical Journal.

The Arkansas State Board of Health has elected the following officers: President, L. D. Duncan, Waldron; Vice-president, J. G. Gladden, and Secretary, W. B. Grayson, Little Rock.

R. J. Turner recently addressed the League of Women Voters at Fayetteville on the county health program.

M. H. Scott, Fort Smith, recently spent a vacation in Texas.

R. M. Blakely, Little Rock, has recovered from an attack of pneumonia.

BORN—On February 5th, a daughter, Elizabeth Sue, to Dr. and Mrs. T. T. Ross, Little Rock.

The following have been appointed county chairmen of the Arkansas Wildlife Federation: S. A. Drennen, Stuttgart; H. K. Carrington, Magnolia, and E. G. Fendley, Leslie.

A. A. Blair recently addressed the District Nurses' Association at Fort Smith.

M. V. Russell recently addressed the El Dorado Lions club on "Conservation of Vision."

F. W. Carruthers, Little Rock, spent a recent vacation in Cuba and while there addressed the medical school of the University of Havana on "The Treatment of Pelvic Fractures."

Jos. F. Shuffield, Little Rock, has been reappointed a member of the Arkansas Game and Fish Commission.

W. J. Curry, Rogers, celebrated his 89th birthday January 30th.

Howard Stern recently addressed the Little Rock Kiwanis club on "Hobbies."

A. A. Blair has been renominated to the school board at Fort Smith.

E. H. White, Little Rock, has been appointed a member of the advisory board of the Florence Crittenton Home of that city.

H. V. Stewart, Little Rock, addressed the Washington County Medical Society at Fayetteville February 6th.

J. H. Fowler has been elected treasurer of the Boone County Telephone Company at Harrison.

P. H. Phillips, Ashdown, has been appointed to The State Medical Board of the Arkansas Medical Society, succeeding the late Dr. J. C. Graves.

Ellery C. Gay, Little Rock, recently addressed the Camden Lions club on the activities of the crippled childrens' division of the state welfare department.

OBITUARY

EMMETT A. PICKENS, age 62 years, died of heart disease at his home in Bentonville January 29th after an illness of three weeks. A graduate of the University of Arkansas School of Medicine in 1909, he formerly practiced at Grove and Ashland, Oklahoma, before locating in Bentonville in 1927. He had served as president of the Benton County Medical Society and was formerly health director for Benton County. Surviving relatives are his wife and four brothers, one of whom is Dr. R. A. Pickens, also of Bentonville.

JESSE CLYDE GRAVES, age 60 years, died at his home in Lockesburg February 2nd. Born June 29, 1879, at Gravelly, he was educated in the schools of the county and received his degree in medicine from the University of Arkansas School of Medicine in 1914. He first located at Lebanon where he remained three years, then moving to Lockesburg where he had practiced continuously for 22 years. His service to organized medicine had been constant during the years of his life and at the time of his death he was a member of The State Medical Board of the Arkansas Medical Society. Other activities were membership in the Masonic, Woodmen and Odd Fellow lodges, the American Legion and on the Lockesburg school board. Surviving relatives are his wife, four brothers and one sister.

THOMAS E. BENTON, age 64 years, of Lonoke, died in a Little Rock hospital February

5th. A graduate of the Memphis Hospital Medical College in 1901, he had practiced at Lonoke for 38 years. He had formerly served as coroner and as city health officer and was Rock Island Lines surgeon at that city for 28 years, in addition to having also served for the Missouri Pacific Lines and for the Cotton Belt Railroad. He was a member of the Methodist church.

WILLIAM MACK MAJORS, age 58, died at his home in Paragould February 14th after a prolonged illness. Born in Greene county, he graduated from the Memphis Hospital Medical College in 1912 and had successively practiced at Walcott, Lefe, and at Paragould since 1924. During the World War he served as first lieutenant in the medical corps. For 12 years he was secretary-treasurer of the Greene County Medical Society and had served as delegate from that society to the Arkansas Medical Society on numerous occasions. He served as Councilor from the First District in 1933-1935 and was president of the First Councilor District Medical Society in 1938. He had attended every meeting of that society for nearly 20 years. From 1935 to 1939 he served as a member of the State Medical Board of the Arkansas Medical Society. Appointed county health officer in 1936, he served in that capacity until ill health forced his retirement about a year ago. Active in the American Legion he was commander of his post for three years and of his district organization for one year. Surviving relatives are his wife and a son.

RANDOM THOUGHTS OF THE SECRETARY

January 25th. Turkey dinner with the Kiwanis Club which celebrates its silver anniversary this noon and Raymond Smith makes an address. Noting that the heckling which was so characteristic of this club six to ten years ago continues unabated, which may explain, in part, the success.

January 26th. This day unfolding the pages of The Daily Times-Echo, Eureka Springs, of November 6th, 1937, and pausing to reflect what ruddiness of countenance these folks must have today. In this issue appears a purported interview with the business manager of that city's bid for fame and fortune, in which he is alleged to have been told by the institution's founder: "Tell them (the public) only half of the good things as that is more than the public can absorb, but under no circumstances will we tolerate misrepresentation of anything * * *." Then, too, is that glorious blurb from the Chamber of Commerce: "We are entering a new era of prosperity; truly we are in the 'Land of Beginning Again.'" Contemporary history recalls the Eureka Springs came into being in 1879. The old adage of the first 100 years may hold true. Anyway, good luck and a fresh start, Eureka Springs, you are one of us!

February 1st. Reading in the society column of the Eureka Springs paper of the wife who went to Little Rock to visit her husband and thinking that society editors do not need to tell all they know.

February 4th. Comes the epidemic of Confucius jokes, displacing the popular little Audrey stories, and you can be certain that where three are gathered together over coffee or in the doctor's room, that a new one is being told.

February 10th. These days the bridge tables are in feverish excitement over estrogenic hormones et al while many a vexed colleague tries to explain the rationale of theelin administration. The etiology appears to lie in the current Cosmopolitan wherein old Pepys himself joins the medical contributing staff with Rex Beach.

February 10th. The unseasonable winter urges us to adapt ourselves, so we journey forth to Tulsa in Oklahoma where the Oilers and the Minneapolis Millers wage a merry war at ice hockey for us, the Tulsans proving the more aggressive and gathering in the victory. This, our first hockey game, proves highly exciting in the constant threat, and frequent realization, of physical combat, the thrilling speed and gyrations of the players on the ice, but most thought-provoking is the penalty dealt for roughness—two minutes or more on the side lines—while one's fellow players struggle along short-handed, a handicap which was too much at the time Tulsa shot the winning goal, two Minneapolis "roughies" sitting this one out. Away late to the comfort of the Hotel Tulsa whose management presents its compliments with three rosy red apples, a good night cap, at that.

February 11th. Arising in the late morning, we look over the oil capital of the world and marvel at Mohawk Park, one of the country's largest, well-kept and complete in its recreational facilities; the zoo, of course, captivating the youngster, despite the goose which bit the finger

extending a peanut. In retaliation chewing gum is offered the goose, the outcome of which we did not observe. Late in the day returning to Arkansas, encountering the greatest number of twenty-mile-per-hour drivers it has ever been our harassment to endure on a two-slab pavement.

February 12th. What we have been pleased to refer to as these "old eyes" becomes definite reality today as we begin to view the environment through bifocals. Challenged by Everett Moulton's statement that no one but a neurasthenic complains of trouble in their use, we struggle through the day, our major difficulty arising in reading the paper and in the use of the typewriter. The day completed, we are convinced that Jim Amis' alibi for a succession of automobile wrecks which he attributed to this cause holds no water and we can hazard some other reasons.

February 13th. The sanatoria physicians present the county society program from which we retain a vivid impression of the surgeon essaying to cut a pleural adhesion by the closed method, hemorrhage ensuing, the cessation of which will require opening the thoracic cage. And there are those who speak with awe of postpartum bleeding.

February 15th. Tonight with the conversationally active fellow-traveler, Goldstein, to Poteau where Memorial Hospital's Binkley discusses many an aspect of cancer in one of the most practical talks we have heard. This activity of Oklahoma's, sponsored by the Women's Field Army, could well be carried out in Arkansas, and we hope the Committee on Cancer Control will take steps to provide it.

February 16th. Jim Lewis from Fayetteville way visits this morning and sets us an example of industry and concentration in reviewing the literature which our library holds. On this day winter again returns as has been its wont for many a day since the holidays.

AMERICAN BOARD OF INTERNAL MEDICINE, INC.

The American Board of Internal Medicine will conduct oral examinations just previous to the meeting of the American College of Physicians in Cleveland and just in advance of the meeting of the American Medical Association in New York City.

Applicants who have successfully passed the written examination and plan to take the oral examination in 1940, should advise the office of the Secretary at least six weeks in advance of the date of the examination they desire to take.

The next written examination for 1940 will be given on October 21st. Applications for this examination must be filed in the Secretary's office by September 1st.

Application forms may be obtained from Dr. William S. Middleton, Secretary-Treasurer, 1301 University Avenue, Madison, Wisconsin, U.S.A.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Mrs. Martha Whitthorne Gann, wife of Dr. Dewell Gann, Sr., died at her home in Benton, January 9th. She was the daughter of Col. Sam Houston Whitthorne, known for his distinguished record during the Civil War and who came to Benton from Shelbyville, Tenn., in 1871. Mrs. Gann's mother was Margaret Locke Johnston, daughter of Mathew Locke Johnston and Martha Harding Johnston, Tennessee pioneers, and the granddaughter of John Johnston of Revolutionary fame, who came from Edinburgh, Scotland, to settle in Virginia, and Elizabeth Locke Johnston.

Mrs. Gann was four when she came with her family from Tennessee, one of twelve children. She attended school in Benton before going to live several years with an aunt, Mrs. Thomas Craighead, at Nashville, Tenn., where she had private tutors. Before her marriage Mrs. Gann assisted her father in the publication of the Saline Courier, which he owned first in 1883. Col. Whitthorne, who was a lawyer, also gave much of his attention to mining interests and owned the Saline Courier, now the Benton Courier, at various other times until 1888.

Among the organizations of which Mrs. Gann was a member were the Daughters of the American Revolution, United Daughters of the Confederacy and the American Legion Auxiliary. She was an honorary charter member of the Woman's City Club in Little Rock and an Honorary member of the Arkansas Pioneer's Association. She was a leader in promoting a state medical auxiliary and was that organization's first president-elect in 1927. She was one of 12 women of Arkansas selected to represent the state at the inauguration of President Roosevelt in 1932.

She and Dr. Gann, who celebrated their 50th wedding anniversary September 4, 1939, assisted in rearing five orphans and in the education of four young doctors. Mrs. Gann was a member of the First Baptist Church.

She is survived by her husband and a son, Dr. Dewell Gann, Jr., of Benton. Private funeral services were held at the home by the Rev. J. M. Workman of Carlisle. Active pallbearers were members of the Auxiliary to the Saline County Medical Society, and honorary pallbearers were members of Auxiliary to the Arkansas Medical Society.

March is the month the auxiliary to the Arkansas State Medical Society will observe "DOCTORS' DAY."

Our object in observing "Doctors' Day" is to honor the profession, present and past; to study and commemorate its promotion of human health and happiness through the ages; and through its observance to express our appreciation and respect and love for the members of the medical profession.

"Doctors' Day" was originated in Barrow county, Georgia, in 1933.

The idea of "Doctors' Day" was conceived by Mrs. C. B. Almand and Mrs. Earnest Harris, of Winder, Ga. It was adopted by their State Auxiliary in 1934.

Mrs. J. Bonar White of Atlanta, Ga., presented it to the National Auxiliary in 1935; it was adopted and recommended that each state adopt a day in their state. Mrs. White also introduced "Doctors' Day" in 1935 to the Southern Medical Auxiliary.

We urge that county auxiliaries, some time during the month of March, observe "Doctors' Day" in some way. In your county papers have articles printed, if available, radio talks, banquets, dances, parties, etc., sending flowers to the offices of those who are ill, and placing flowers on the graves of deceased physicians.

At the state meeting this year we want to report that "Doctors' Day" was observed by every Auxiliary in the state. It is indeed fitting that we should honor the men who through their struggles have changed our destinies and shaped our civilization in their defense of human living and to remind ourselves that we have joys in living today which former times did not experience and these are due to the unselfish and unwearied labors of the medical profession.

Mrs. H. T. Smith, Chairman
"Doctors' Day" Committee

Wives of Arkansas physicians, who attended the two-day course of post-graduate instruction, sponsored by the Arkansas Medical Society, were honored at an afternoon tea given January 24th, at the home of Dr. and Mrs. D. A. Rhinehart. Beautiful spring flowers were arranged in the rooms and the dining room tea table held an arrangement of narcissus, yellow roses and blue heather. Cream candles burned in silver candelabra on the table. Mrs. Rhinehart, who is chairman of the Entertainment Committee for the Woman's Auxiliary to the Pulaski County Medical Society, received informally, assisted by Mrs. Paul Fulmer, Mrs. B. A. Rhinehart and other members of the society. Mrs. L. F. Barrier, president of the society, and Mrs. C. W. Garrison, a past president, presided at the tea service.

The Union County Medical Society Auxiliary met at the home of Mrs. A. D. Cathey. A detailed study of the Wagner Bill was given by Miss Evelyn Moore.

Serving with Mrs. Cathey as co-hostesses were Mrs. G. C. DeBolt and Mrs. F. P. Vines.

Mrs. E. J. Munn and Mrs. Bruce Crowe, chairman of committees on hospital work, reported on the nursery project.

Refreshments were served by the hostesses.

The Woman's Auxiliary to the Bowie-Miller Counties Medical Societies met January 26th at the home of Mrs. Charles Adna Smith, Jr., for the monthly meeting. Co-hostesses with Mrs. Smith were Mrs. T. E. Fuller, Mrs. Allen Collom, Mrs. T. F. Kittrell and Mrs. C. E. Kitchens.

Mrs. R. C. Cross, president, conducted the business session and heard reports from the various committees. Mrs. Fuller advised, as head of the philanthropic committee, that \$15.00 had been forwarded to the Arkansas Tuberculosis Association. Mrs. Decker Smith, Chairman of Hygeia, stated that fifty-four subscriptions had been secured to this publication. Mrs. C. E. Kitchens spoke of the annual essay contest in the school and advised that the topic selected would be "Conservation of Vision." Mrs. J. E. Tyson, in the absence of Mrs. L. H. Lanier gave a regime of the Auxiliary's accomplishments since the beginning of its activities in the fall.

Dr. Edgar Easley, director of the Miller County Health Unit was the guest speaker for the afternoon and gave a most informative talk on the work being done by this organization. He praised highly the work being done by the Junior Service League in connection with the maternity cases which come under that phase of the public health work. The control of communicable diseases, tuberculosis diagnosis, adult hygiene, the examination of food handlers and the innumerable visits made by the two county health nurses are but a few of the worthy undertakings of this organization.

At the conclusion of the meeting guests were invited to the dining room where a delicious salad course was served from a table particularly lovely with an epergne of mixed spring flowers.

Guests for the afternoon were Mrs. Anthony Rossitto, Mrs. H. H. Puckett and Mrs. C. M. Kelly.

The Franklin County Medical Auxiliary met January 18th with Mrs. W. H. Gibbons as hostess.

Much ground was gone over concerning the work the Auxiliary has set out to do.

Mrs. Bollinger having resigned, Mrs. W. H. Gibbons was elected vice-president.

Mrs. H. O. Clark was appointed chairman of Oral Hygiene.

Mrs. O. Porter McCam was appointed chairman of the milk fund committee. The milk fund is for the purpose of furnishing milk for the underprivileged children in the grade schools. The committee reported \$20.00 in the funds for the third week of the campaign.

The Auxiliary has placed Hygeia in the High School and Public Libraries and has urged the public to read them.

After the business session refreshments were served by the hostess.

The Auxiliary to the Ouachita County Medical Society began the year's work in September with a "Dutch-Treat" dinner.

In October the District meeting was in the form of a dinner program.

In November a dinner meeting with guest speakers.

December, a dinner meeting with reports of the Southern Medical Auxiliary meeting, which three of the local members attended.

January, the Auxiliary met jointly with a district meeting in El Dorado.

In February the Auxiliary plans a joint meeting "Ladies Night" with the Medical Society.

The Woman's Auxiliary to the Washington County Medical Society held both meetings in January. The first was a dinner meeting at the hotel with a good attendance.

Mrs. R. T. Henry, of Springdale, entertained the Auxiliary with a luncheon at the second meeting. At the conclusion of the luncheon, Mrs. Fred McChesney gave a review on the book "Journeys End."

Mrs. P. L. Hathcock,
Publicity Chairman.

Mrs. Ralph Weddington and Mrs. Raymond Smith were hostesses for a luncheon and business meeting of the Auxiliary of the Sebastian County Medical Society February 12th at 12:30 o'clock at the home of Mrs. Ruth Moss Carroll, 400 North Greenwood avenue.

Valentine suggestions were used in table appointments. Mrs. I. Fulton Jones, president, presided at a short business session. No program was arranged since the Auxiliary members had expected to have as their honor guest, Mrs. C. E. Kitchens, state president of the Auxiliary, who was to come from her home in DeQueen for an official visit to the Auxiliary. Illness prevented her keeping the engagement at the luncheon where she was to have been a guest speaker.

Mrs. W. R. Brooksher, Jr., who is to be a general chairman for the State Medical convention which is to be held in Fort Smith April 15, 16 and 17, led a discussion of the Auxiliary plans for the convention.

Luncheon guests were Mrs. I. F. Jones, the hostesses, Mrs. Smith and Mrs. Weddington, Mrs. Hardy H. Smith, Mrs. D. W. Goldstein, Mrs. J. S. Southard, Mrs. W. R. Brooksher, Jr., Mrs. Walter G. Eberle, Mrs. Everett Moulton, Mrs. S. J. Wolferman, Mrs. W. F. Rose, Mrs. C. W. Hall, Greenwood, Mrs. B. L. Ware, Greenwood.

Mrs. W. F. Rose,
Publicity Chairman for the
Auxiliary of the Sebastian
County Medical Society.

The Auxiliary to the Ninth Councilor District Medical Society met with their doctors in the Hotel Seville in Harrison. We saw the films and heard lectures on "Cancer" and "The Use of Oxygen Tents." At 2:30 p. m. the Auxiliary retired to the lobby to have their own meeting. Mrs. J. G. Gladden, president, presided. Roll call was answered "yes" or "no" as to whether the members had received health examinations during the year. The minutes of the last meeting were read and approved. The secretary read a communication from Dr. Brooksher. The treasurer reported \$3.51 in the treasury. Physical Health chairman, Mrs. U. Jackson, reported 100% on the check-up for the Auxiliary members. The Hygeia chairman reported 6 subscriptions. The wives of Harrison doctors donated a subscription to the high school library. Mrs. D. K. McCurry, Public Relations chairman, reported that the Auxiliary sponsored the health check-up and the sale of tuberculosis seals at Christmas. By motion the Auxiliary purchased a book on parliamentary rules to be

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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handed down by each president. The nominating committee presented the following slate which was unanimously accepted: President, Mrs. E. Fowler; Vice-president, Mrs. D. K. McCurry; President-elect, Mrs. J. H. Fowler, and Secretary-treasurer, Mrs. D. L. Owens. Delegates to the annual meeting were appointed: Mrs. J. H. Fowler, 1st alternate, Mrs. D. K. McCurry, and 2nd alternate, Mrs. L. M. Weast. Mrs. Fowler, our new president, then took the chair and appointed the following committees: Hygeia, Mrs. J. G. Gladden; Physical Health, Mrs. Ulys Jackson; Public Relations, Mrs. D. K. McCurry; Courtesy, Mrs. J. G. Gladden; Health Exhibit, Mrs. D. L. Owens; Memorial, Mrs. O. B. McCoy; Constitution and By-laws, Mrs. Henry Kirby; Legislation, Mrs. Lloyd Jackson and Mrs. A. V. Adams; Social and Program, Mrs. J. G. Gladden (June), Mrs. J. H. Fowler (December); Doctors' Day, Mrs. U. Jackson and Mrs. J. H. Fowler. The Auxiliary voted a prize of one dollar to the student making the best health poster. Mrs. A. L. Carter, Berryville, was welcomed as a new member. Mrs. Thompson was made an honorary member. Dues collected, \$15.00.

Mrs. D. L. Owens,
District Secretary.

BOOK REVIEWS

Modern Clinical Psychiatry: By Arthur P. Noyes, M. D., Superintendent, Norristown State Hospital, Norristown, Pa. Second Edition, Rewritten and Enlarged. 570 pages. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$5.00 net.

Should one desire to select a book as a text in psychiatry, particularly for medical students or one just beginning this study, it would be appropriate to recommend the second edition of Dr. Noyes' *Modern Clinical Psychiatry*. Not only has the writer produced a well organized series of lectures but he has improved his own presentation as made in the first edition some few years ago.

To begin with, the author lays the foundation for his discussions of the major psychoses by a thorough review of the mental mechanisms underlying human conduct and enumerates the various factors that go together to produce conflicts. Following this, Dr. Noyes groups the many symptoms for his readers and deliberately explains the motive behind every disorder. He is thoughtful of his followers in citing definite examples in the way of explanation and does not burden them with lengthy and conflicting material.

The pages that describe the psychoneuroses are particularly noteworthy. The weak point in many books on psychiatry is the author's lack of differentiation between the psychoneuroses: Neurasthenia, Psychasthenia, and Hysteria. Dr. Noyes fully describes this group, differentiating them, and mentioning the several plans of treatment. A brief discussion is given of psychoanalysis. The general practitioner would find this section well worth his while in handling some of the borderline cases.

In conclusion, the book is interesting, informative, and free from repetition.

Cancer of the Larynx: By Chevalier Jackson, M. D., Sc. D., LL.D., F. A. C. S., Honorary Professor of Broncho-Esophagology and Consultant in Broncho-Esophagologic Research, Temple University Medical School, Philadelphia;

and Chevalier L. Jackson, A. B., M. D., M. Sc. (Med.), F. A. C. S., Professor of Broncho-Esophagology, Temple University Medical School, Philadelphia. 309 pages with 189 illustrations on 116 figures, and 5 plates in colors, containing 50 illustrations. Philadelphia and London: W. B. Saunders Company, 1939. Cloth, \$8.00.

This is a comprehensive, authoritative work on cancer of the larynx, thorough as only the Jacksons would have made it. Exceptionally good illustrations are shown. The operative details and post-operative management is given with completeness. Radiation therapy is adequately presented. This is a recommended book.

Diagnostic Signs, Reflexes and Syndromes. Standardized by William Egbert Robertson, M. D., F. A. C. P., Visiting Physician, Medical Division, Philadelphia General Hospital; Visiting Physician, Saint Luke's Hospital, Children's Hospital and Northeastern Hospital. In collaboration with Harold F. Robertson, B. S., M. D., Instructor in Medicine, University of Pennsylvania; Assistant Visiting Physician, Philadelphia General Hospital and Methodist Hospital, Philadelphia. Pp. 309. Price \$3.50. Philadelphia: F. A. Davis Company, 1939.

In alphabetical order the authors have compiled diagnostic signs, reflexes and syndromes with descriptions and explanatory notes of their significance. The book will be of especial help to students but serves the practitioner well as a companion volume to the dictionary.

Injection Treatment of Hernia, Hydrocele, Ganglion, Hemorrhoids, Prostate Gland, Angioma, Varicocele, Varicose Veins, Bursae and Joints: By Penn Riddle, B. S., M. D., F. A. C. S., Assistant Professor of Clinical and Operative Surgery, Baylor University, College of Medicine; Director of the Varicose Vein Clinic, Parkland Hospital, Dallas, Texas. 290 pages with 153 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$5.50.

The injection treatment of sclerosing solutions of these conditions where they are definitely indicated is given in a practical way, with indications and contraindications. The author gives us the most common conditions where the injection treatment is the method of choice. Unusual conditions and experiences of men who have used this method of treatment are also given. The text is written in a clear concise manner. This is another practical treatise on this method of treatment.

A Manual for Diabetic Patients: By W. D. Sansum, M. D., Chief of the Staff of the Sansum Clinic and Director of Metabolic Research of the Santa Barbara Cottage Hospital; Alfred E. Koehler, Ph. D., M. D., Member of the Staff of the Sansum Clinic and member of the Metabolic Research Staff of the Santa Barbara Cottage Hospital, and Ruth Bowden, B. S., Dietitian of the Sansum Clinic, Santa Barbara, California. Pp. 227. Illustrated. Price \$3.25. New York: The Macmillan Company, 1939.

This is a well-prepared text for the laity, following the practices of diabetic clinics of this country. General measures are emphasized in addition to diet, insulin and exercise in the patient's care. Menu planning is excellently presented and the food tables are simple. This is an excellent book for the diabetic patient.

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No. 11

AN ANALYSIS OF THE ROUTINE SEDIMENTATION RATE IN 1,000 ADMISSIONS TO THE ARTHRITIC CLINIC, LEVI MEMORIAL HOSPITAL*

S. D. WEIL, M. D.; EUCLID M. SMITH, M. D.; L. E. KING, M. D., and W. T. WOOTTON, M. D.
Hot Springs National Park

It has been fairly definitely shown by Oakley (1) that the rate of sedimentation of the red blood cells is due in a vast measure to the direct ratio of the fibrinogen content of the blood plasma. A blood plasma without fibrinogen will have a negligible sedimentation rate. He has shown that this may be progressively increased by the addition of known quantities of fibrinogen thus causing a definitely increased rate of sedimentation per hour.

With this known quantity to start with we should anticipate an increased sedimentation rate in only those morbid states which in an (at present) unknown manner disturb the fibrinogen ratio of the blood. Many of these conditions are surmised but not definitely proven as to *modus operandi*. The most culpable of all morbid states seems to be an infective agency, and this agency apparently offends in direct proportion to its activity. Other morbid states have also been charged with modifying the fibrinogen ratio, whether in the absence of a concomitant focus of infection has not been clearly settled.

We are interested in the academic question of how an arthritic process, *per se*, may influence the fibrinogen content of the blood plasma, and thereby affect the sedimentation rate of the erythrocytes.

A comprehensive survey of the value of the sedimentation rate as an aid to diagnostic and prognostic conclusions was published by Bannick, Gregg, and Guernsey (2) in the latter part of 1937. They state: "We believe that the practical value of the determination of sedimentation rates in general medicine is three-

to indicate the progress of diseases such as tuberculosis, pelvic inflammatory disease, acute cholecystitis, rheumatic fever, infectious arthritis, pneumonia, and other thoracic infections and suppurations, Hodgkins disease, acute febrile illnesses, and acute coronary thrombosis, and (3) to aid in differential diagnosis." They further state: "In rheumatic fever also the test provides the most accurate guide as to activity. The sedimentation rate usually remains increased for a considerable period after the elevated temperature has subsided and after involvement of the joints has disappeared." Again they state: "The sedimentation rate is increased in gout in the stage of active involvement of the joints but returns to normal between attacks."

They then quote from Slocum's article (3) of the previous year in which he reported 91 of 100 cases of atrophic arthritis in which the sedimentation rate was more than 25 m.m. (Westergren), the average rate being 71.6 m.m. per hour. In only three of his cases was the rate less than 15 m.m., and these were reported as cases in which there was very little activity. Slocum further reported 100 cases of fibrositis in which only 11 had a rate higher than 25, and the average was 11.6 m.m. per hour. They (Bannick, et al.) further state: "In simple hypertrophic arthritis the sedimentation rate is rarely increased. In 25 cases taken at random from our files the rate was normal in each instance." Lautman (4) reported 200 cases from this clinic in 1937, in which he stated: "The sedimentation rate in 118 cases all of the atrophic arthritics was above normal; 34 cases of hypertrophic arthritis were also above normal, and 48 were below" (Cutler method). He further said: "This investigation was undertaken to determine if

* From the Arthritic Clinic, Leo N. Levi Memorial Hospital, Hot Springs National Park.

possible to what extent the blood sedimentation rate coincides with clinical evidence of bacterial activity in chronic arthritis." In his conclusions he said: "(1) The sedimentation test is an index of the degree of bacterial activity in chronic arthritis." (2) The test is of value in establishing the diagnosis in cases where joint changes are slight or lacking. (3) The test indicates that bacterial activity plays a greater role in hypertrophic arthritis than is generally supposed."

Under Queries and Minor Notes in the Journal of the American Medical Association (5), appeared this statement: "The blood sedimentation rate is more rapid in disease than in health. The chief value of the sedimentation test is in distinguishing between inflammatory and non-inflammatory processes and in estimating the activity or progress of pulmonary tuberculosis. There is usually an increase in serum globulin and fibrinogen in conditions with rapid sedimentation. The sedimentation velocity is accelerated in active tuberculosis, acute inflammations, infectious diseases, carcinoma, pregnancy, and rheumatoid arthritis."

Merritt (6) thinks most cases of atrophic arthritis show an increased rate while the hypertrophic rate is normal.

We are presenting herewith the tabulated results of the sedimentation rate of 1,000 persons on admission to the Arthritic Clinic of the Leo N. Levi Memorial Hospital. In this list the sedimentation rate on admission ranged from 2 to 38 m.m. per hour (Cutler), the average rate being 14.7 m.m. per hour. The cases were divided according to diagnosis as follows: atrophic arthritis, 435; hypertrophic arthritis, 111; synovitis, 210, and rheumatoid, 244.

Of the 1,000 admissions, 756 had joint disturbance, the other 244 cases were rheumatoid disturbances as neuritis, neuralgia, myositis, etc., grouped as rheumatoid. It may be noted that the average rate of sedimentation in this group is slightly lower than those in which the joint was involved.

We call attention to the fact that all of our cases are ambulatory, which may have a bearing on the general health of those seen or the side complications that so often accompany or predispose to the joint involvement, and which complication may account for the increase in the rate with which the erythrocytes settle. We have further divided our cases into those known to have a focus of infection and those in which such a focus was not discovered. We further emphasize the fact that where there patently appeared a focus of infection it was rarely, if ever, acute in virulence but usually of long duration and low potency.

In looking at the general average of the sedimentation rate of those entering this clinic with some form of chronic joint disturbance, one would say that it is slightly above what we consider a normal rate. However, numerically considered, 355 of the 756 with joint disturbance had a rate of 12 or less. Thus approximately 47% of all joint cases had a normal reading. If we add to that number to the 156 that averaged only 15 m.m. per hour, we have a total of 511 or two-thirds of all cases with a sedimentation rate of no significance. We are at a loss for an explanation as to how in the other one-third of the admissions could any diagnostic or prognostic aid be obtained.

In considering the atrophic type, 50% of those presenting had a normal rate, and again two-thirds are in or below the 15 column.

It has frequently been stated that the hypertrophic type of arthritis has a normal sedimentation rate. In our list only 46 cases had a normal reading, 23 were in the doubtful column, and 42 had a frankly increased rate. From the standpoint of joint disturbance this does not seem to give us any degree of enlightenment. Certainly there is no significant difference in the readings of the atrophic and hypertrophic as may be considered diagnostic.

Practically the same ratios exist where we found chronic foci of infection and where we did not find them.

ATROPHIC—435 CASES				
AVERAGE SEDIMENTATION RATE 15				
	Cases	Average	Range	M. M. Per Hour
With foci	190	15.8	2:35	5-10-15-20-25-30
Without foci	245	14.7	2:38	45-40-21-28-30-26 58-73-33-27-30-24
HYPERTROPHIC—111 CASES				
AVERAGE SEDIMENTATION RATE 15.7				
	Cases	Average	Range	M. M. Per Hour
With foci	40	14.8	4:30	5-10-15-20-25-30
Without foci	71	16.2	3:31	7-12- 8- 4- 8- 1 9-18-15-11-15- 3
SYNOVITIS—210 CASES				
AVERAGE SEDIMENTATION RATE 16				
	Cases	Average	Range	M. M. Per Hour
With foci	98	17.8	3:38	5-10-15-20-25-30
Without foci	112	14	3:34	11-19-20-15-12-21 27-36-19- 9- 8-13
RHEUMATOIDAL—244 CASES				
AVERAGE SEDIMENTATION RATE 12				
	Cases	Average	Range	M. M. Per Hour
With foci	99	15	3:34	5-10-15-20-25-30
Without foci	145	10	4:32	17-31-15-14-15- 7 46-39-25-18-11- 6

Summary

In an analysis of 1,000 ambulatory cases presenting, on which a sedimentation rate was done,

no information was had as to diagnosis, prognosis, or focus of infection.

Two-thirds of the cases of atrophic arthritis had a sedimentation rate within a normal range. As many hypertrophic cases had an increased rate as fell within the normal.

We think the usefulness of the test in arthritis has been over-estimated and may be quite misleading. It should be of considerable prognostic value in rheumatic fever as a guide to the prevalence and activity of the infecting agency.

Its use in acute morbid processes that tend to derange the fibrinogen content of the blood plasma seems quite logical.

In conclusion we desire to call attention to a paragraph in a paper by Roger I. Lee (7), read before the American College of Physicians last year. In speaking on the trends in medical investigation he had this to say under the heading of **UNDUE DEPENDENCE ON SEDIMENTATION TEST.**

"Many tests have been devised merely because the advocates of these tests, finding the tests positive in some particular disease and negative in normal persons, concluded that the test was diagnostic of this disease. In many instances the test is merely positive for some general type abnormality as fever. A vast amount of literature has been accumulated on the so-called blood sedimentation rate. Following loose reasoning, the blood sedimentation rate was supposed to be diagnostic of a wide variety of conditions. It was pointed out, when the sedimentation rate was being discussed in the early stages, that in normal persons there was a normal sedimentation rate. In many, but not in all, diseases there seemed to be an alteration of the many things that happen; the human organism is not normal. Changes in a sedimentation rate in the same individual may be of some value in determining the course of the disease, and indeed, the prognosis. After a good many years that is the conclusion which has emerged out of a huge mass of contradictory and conflicting conclusions and summaries. Even now undue dependence is placed on this test, in the first place, because there is no specificity about this test, and, in the second place, because there may be some other condition which is altering the rate besides the condition which is being studied."

THE USE OF AIR IN THE TREATMENT OF SPASTIC PARALYSIS*

PAT MURPHEY, M. D.
Little Rock

In the hope of finding some means of relieving the spastic paralysis which follows birth injuries, I have treated some children thus afflicted by giving them air intraspinally. For the sake of brevity, I shall not describe the signs and symptoms of this spastic paralysis, but shall report seven cases which I have treated with air injection. In six cases, the patients were children affected by birth injuries; in one case, the patient was an adult with an acute brain injury following an automobile accident.

In some cases, the spinal fluid was drawn off in 5 c.c. to 10 c.c. amounts and the same amount of air was injected. In others, no fluid was drained before the air was injected. I have given air in amounts of from 20 c.c. to 100 c.c. at one treatment.

I have watched these patients over a period of time until I am convinced that this treatment has helped them both mentally and neurologically. The greatest improvement, however, has been mental. I have not had a fatal result from this treatment; but in two cases, it was necessary to give carbon dioxide and oxygen when the fluid became overloaded with air.

CASE No. 1—RET. CASE—H. C. I.

History brought to the hospital with the patient:

Age 6 years, male. History of infantile paralysis in right arm and leg when about 6 months old. Normal birth. At age of 6 months, parents found him partially paralyzed in right arm and leg; discovered he could not use his right arm or right leg well.

Examination:

Revealed patient to be well nourished but paralyzed on right side of body. There were contractures of hands and fingers; exaggerated deep reflexes; no anesthesia. There was a lack of coordination of right arm due to contractures and athetosis in arm and fingers. Found no heart, lung, blood, or kidney diseases. Mentally backward.

Diagnosis:

Spastic paralysis due to birth injury.

Treatment:

On October 13, 1937, began to draw off spinal fluid and inject air. At this time a total amount of 21 c.c. of spinal fluid was drained off and 38 c.c. of air injected. At the end of this treatment, the child was complaining of headache and a fullness in his chest, but returned to his bed in good condition.

On November 19, 1937, a total amount of 24 c.c. of spinal fluid was drawn off and 27 c.c. of air injected.

* From the Neurological Department of the School of Medicine, University of Arkansas, and the Arkansas Children's Hospital at Little Rock.

Patient stood the treatment well, despite some nausea. Again on January 18, 1938, 31 c.c. of spinal fluid was drained off and 32 c.c. of air injected. The boy now had an excessive flow of saliva, sufficient to run out of his mouth onto his pillow, was sweating freely and complaining of a headache. His temperature was 99° at 4 p. m.

On May 4, 1938, 15 c.c. of fluid was drained off when the flow just stopped. 25 c.c. of air was injected. The patient was returned to his bed in good condition but became more drowsy, and for two days complained of a headache when he raised his head from the pillow.

On June 17, 1938, 20 c.c. of fluid was drawn off and 35 c.c. of air injected when the boy began to complain of a headache and said he could feel water dripping inside his head. Another 5 c.c. of air was injected, making a total of 20 c.c. of fluid drained and 40 c.c. of air injected. The child was returned to his bed in good condition.

On July 8, 1938, 20 c.c. of fluid was drawn off and 48 c.c. of air injected before the patient became nauseated and said his shoulders were hurting. Another 10 c.c. of air was injected, making a total of 20 c.c. of fluid drained off and 58 c.c. of air injected. Boy was in good condition, but made complaint of headache again.

August 25, 1938, 10 c.c. of fluid was drawn off and 25 c.c. of air injected when patient complained of a dry mouth. Now 20 c.c. of fluid was drained and 50 c.c. of air injected; a total of 30 c.c. of fluid drained and 75 c.c. of air injected. Patient was nauseated and vomited. His temperature was 100° at 4 p. m.; he was sweating freely with the nausea, but returned to bed in good condition.

On January 23, 1939, a total of 10 c.c. of fluid was drained and 75 c.c. of air injected. Patient had headache, was sweating freely, and had some nausea.

Progress:

This little boy is walking better; he stands straighter, and the trunk and lower extremities are not flexed as they were before treatment was begun. He is more alert mentally, shows more interest in his school work, and is more interested in the other children in the hospital, to the extent of playing games with them.

CASE No. 2. RET. CASE—R. A. J.

History brought to the hospital with the patient:

Age 8 years, male. Normal birth, but afflicted since birth. No movement of left arm or left leg. Not able to walk by himself.

Examination:

Showed him to be well nourished. He had contractures of left arm and left leg, also deformed right arm and right leg. Hyperactive reflexes. Athetosis of fingers of both hands. No anesthesia. Could not walk alone. Could not talk plainly. No heart, lung, kidney, or blood diseases.

Diagnosis:

Birth injury; spastic paralysis.

Treatment:

April 22, 1938, 25 c.c. of fluid was drained off; 27 c.c. of air injected. Child could not talk but kept putting his hand to his head. Sweating.

May 16, 1938, 30 c.c. of fluid drained off; 40 c.c. of air injected.

June 20, 1938, 15 c.c. of fluid drawn off; 24 c.c. of air injected. Boy was crying with headache. The following day he was nauseated and vomiting.

July 7, 1938, 20 c.c. of fluid drawn off; 50 c.c. of air injected. Saliva was flowing freely. Head hurting.

August 24, 1938, 26 c.c. of fluid drawn off; 100 c.c. of air injected. Saliva Flowing Freely. Temperature 99°. Next day, patient was drowsy, stupid and vomited once. Refused food.

November 29, 1938, 25 c.c. of fluid drawn off; 80 c.c. of air injected. Patient crying with headache. Saliva flowing from mouth. Temperature 100° at 4 p. m.

February 6, 1939, 1 c.c. of fluid drawn off; 100 c.c. of air injected. When lumbar puncture needle was withdrawn, about 5 c.c. of air came out under the skin.

The injection of air very greatly increased the flow of saliva from the patient's mouth.

Progress:

This patient is talking more plainly and is trying to walk alone. With help he walks much better. His improvement has been so marked that an orthopedist is now applying casts to lower extremities to assist him to walk. Boy now wants to be in room with children rather than alone.

CASE No. 3. G. E. G.

History brought to the hospital with the patient:

Age 5 years, male. Chief complaints were difficulty in walking and talking. Sat alone at 2½ years; walked at 3½ years. His right arm and leg were paralyzed to using them to any extent. The mother said he always had had trouble in moving himself.

Examination:

Showed the boy to be well nourished. He had a right spastic hemiplegia and a spastic gait. All deep reflexes were hyperactive. No sensory changes found. No heart, lung, kidney, or blood diseases.

Diagnosis:

Spastic paralysis. Birth injury.

Treatment:

June 20, 1938, 15 c.c. of spinal fluid drained off; 30 c.c. of air injected. At this time, patient was opening and closing his mouth and complaining of his back hurting. After being straightened out from the position during drainage and injection, he began to cry. Boy could not talk enough to tell his complaints, but it was assumed the air was causing him to have a backache and headache.

July 9, 1938, 18 c.c. of fluid drained; 35 c.c. of air injected. Boy fretting, was nauseated and vomited.

August 27, 1938, 20 c.c. of fluid drained; 50 c.c. of air injected. Boy fretting, very restless, sweating freely, nauseated and vomiting. Temperature 100.4° at 4 p. m.

October 27, 1938, lumbar puncture was done; pressure 150 m.m. No fluid drained off. 40 c.c. of air injected when manometer attached to puncture needle showed fluid filled with air, went to top of manometer. Air broke column of fluid in a number of places. 20 c.c. of air injected. Boy vomited as he was returned to bed. Temperature 100° at p. m.

March 3, 1939, 10 c.c. of fluid drained; 50 c.c. of air injected. Boy returned to bed in good condition. Temperature 100° at 4 p. m.

Progress:

The parents see improvement in boy's mental condition. He tries to talk; he laughs and takes more interest in his surroundings. Believing the patient to be better mentally, I requested that he be brought back in 3 months for re-examination and further treatment.

CASE No. 4. R. D. C.**History** brought to the hospital with the patient:

Age 3 years, male. This boy cannot stand alone but stands some by holding to his bed. He has never walked nor talked. Has had spasms. Can scarcely sit alone and quickly falls over when unsupported. Mother in labor about 19 hours when this child was born. No instruments used at birth.

Examination:

Showed the child to be fairly well nourished. He could hardly sit alone in his bed. Could not talk. Had a marked degree of hypotonia in both upper and lower extremities. No deep reflexes. No anesthesia. Could scarcely eat crackers or bread in his hands. No heart, lung, kidney, or blood diseases.

Diagnosis:

Birth injury with mental non-development.

Treatment:

July 8, 1938, 10 c.c. of spinal fluid drawn off; 35 c.c. of air injected. Baby cried but returned to his bed in good condition. About 30 minutes later, he became listless and stopped crying. In another hour, his pupils dilated. He began to stop breathing. Pulse 126. Finger tips became blue and a twitching began in the muscles of his face. He was given artificial respiration by house doctor; carbon dioxide and oxygen. Responding to this treatment, the boy grew better. The following day, he was drowsy but able to eat when fed by the nurse. He returned home July 11, 1938.

August 24, 1938, baby brought back to hospital with a history of no spasms since treatment. Mother said he used himself better to extent that he pulled himself up in bed and stood better by holding to bed. 20 c.c. of fluid drawn off; 20 c.c. of air injected. Child in a little stupor with a pulse of 132. He held his head and cried nearly all day.

November 27, 1938, 2 or 3 drops of spinal fluid drained off; 45 c.c. of air injected. Boy returned to bed in good condition, but 30 minutes later his finger tips turned blue, his pupils dilated and he began to breathe slowly. He was given oxygen and carbon dioxide and soon responded. Improvement allowed stop of oxygen and carbon dioxide in an hour. The patient began to cry.

Progress:

The boy now sits alone and helps feed himself. He notices other patients, and is showing much improvement since treatments were started.

CASE No. 5. RET. CASE—M. F. N.**History** brought to the hospital with the patient:

Age 2 years, female. She is partially paralyzed in both arms and legs, and has but little use of them. Never has walked or talked. Slobbers.

Examination:

Showed this child to be well nourished. She could neither walk nor talk. Lower extremities were spastic. Reflexes were hyperactive. No sensory disturbances.

Saliva flowed from her mouth. No heart, lung, kidney, or blood diseases.

Diagnosis:

Spastic paralysis. Birth injury.

Treatment:

August 18, 1938, 13 c.c. of fluid drained off; 40 c.c. of air injected. At this time, the baby put her hand to head but could not tell her complaint. 15 c.c. of air injected, making a total of 13 c.c. of fluid drawn off and 55 c.c. of air injected. At end of treatment, the baby was trying to say something but was unable to talk.

October 5, 1938, 10 c.c. of fluid drawn off; 58 c.c. of air injected.

January 19, 1939, when 2 c.c. of fluid drained off and 30 c.c. of air injected, the patient was holding her head and sweating. 15 c.c. of air injected. Child nauseated. Total of fluid drained off at this treatment was 2 c.c. and 45 c.c. of air was injected.

Progress:

Mother says her child is better. She now chews her food. She sits up better, and can sit up 2 hours at a time. She wants to walk, pulls herself up in her bed and takes a few steps by holding to someone. She wants to walk all the time.

CASE No. 6. RET. CASE—N. J. H.**History** brought to hospital with patient:

Age 6 years, female. Wants to be moving constantly but movements have no meaning. Not right mentally. Walked at 3 years of age; talked a little when 5 years old. Is pigeon-toed. Normal at birth, but had convulsion at 2 years. Child giggles and jabbars but does not talk plainly enough to be understood.

Examination:

Showed her to be well nourished. No heart, lung, kidney, or blood diseases. Walked with toes turned in. Active reflexes. No anesthesia. Imbicile by scale. Has been sick all her life.

Diagnosis:

Birth injury with non-development.

Treatment:

September 15, 1938, 20 c.c. of fluid drained off; 80 c.c. of air injected.

October 19, 1938, 22 c.c. of fluid drawn off; 100 c.c. of air injected. Child was sleepy during this treatment and sleeping during injection of last 20 c.c. of air. Temperature 100° at 4 p. m.

January 23, 1939, 8 c.c. of fluid drained off; 50 c.c. of air injected. Child restless. Put hands to head. Crying and nauseated. Temperature 102° at 4 p. m.

Progress:

Child is now able to stand and walk around in her bed. She can ask for food. She talks to nurses, which she could not do when first admitted to hospital. Mother says child is better mentally and physically, and we know she is definitely improved.

CASE No. 7. LITTLE ROCK GENERAL HOSPITAL**History:**

Age 21, female. Admitted to hospital March 8, 1939. Patient unconscious with abrasions over face and body.

History of automobile wreck shortly before entering hospital.

Examination and Treatment:

I saw patient about nine hours after admission. She was unconscious. A lumbar puncture revealed spinal fluid containing fresh blood. Blood content was so great that fluid resembled pure arterial blood. 10 c.c. of this bloody fluid was drawn off. I saw patient again seven hours later. She was still unconscious. Another lumbar puncture showed the fluid to contain about same amount of blood. 5 c.c. of fluid drained off and 50 c.c. of air injected. Patient began to move arms and legs. Two hours later she would swallow water when it was put in her mouth, and four hours later, patient would respond to external stimuli and open her eyes when spoken to.

The next day she was more cooperative and complained of headache. She continued to improve, to clear mentally, and was discharged from the hospital on the tenth day. She made a complete recovery.

Experiment:

A lumbar puncture was done on a patient with normal spinal fluid and about 5 c.c. of fluid drained off. A live minnow was dropped in the glass in which the fluid was being collected. The fluid dropped on the minnow until 10 c.c. had been collected. The minnow lived in this fluid all day with no apparent difficulty.

As the first lumbar puncture was being done on the patient cited above, a minnow was dropped into the bloody fluid but it lived only about one minute. As the bloody fluid continued to drop into the glass, another minnow was put in it. This minnow lived about two minutes. Both minnows came to the top of the fluid and put their noses out of the fluid, apparently trying to get fresh air, oxygen.

The bloody spinal fluid did not coagulate but grew thinner and lighter in color after about 30 minutes. At that time, I dropped still another minnow in the fluid and it lived and swam about in normal manner. Later another minnow was put in this fluid and the two fish lived in the fluid all day.

At a later lumbar puncture on the same patient, a fresh, live minnow was dropped in the fluid. It soon began to turn over and became lifeless. Now air was put in the fluid which held the minnow. The minnow began to revive, seemed to recover entirely, and lived all day in the fluid.

The results of this experiment of putting minnows in the spinal fluid made me decide to give air intraspinally to this patient with an acute brain injury and the results of this treatment are given in the case history of the patient as detailed in Case No. 7.

Summary and Conclusions:

It was impossible to make roentgenograms of these children after the injection of air because of their non-cooperation, and of the woman in the seventh case reported, because of her critical condition.

Too, the pressure of the fluid could not be measured because the air broke the column of fluid, as was indicated in the third case.

One noticeable sign that appeared during and immediately following the injection of air, I think worth repeating and stressing, namely, the excessive flow of saliva due to the stimulation of the caudate nucleus.

The history and development of these cases confirm my belief that the injection of air as soon as the brain injury is recognized will help to prevent, and possibly save the patient from the spastic paralysis and the mental conditions which frequently follow birth injuries. I believe, further, that this treatment is indicated in other types of acute brain injury, such as those resulting from accidents.

RESOLUTION

Dr. Jesse C. Graves died in Lockesburg, Arkansas, February 2, 1940. Dr. Graves was 60 years of age.

He was a member of Sevier County Medical Society, Sixth Councilor District of the Arkansas Medical Society, and a member of the State Medical Board of the Arkansas Medical Society.

He filled all the offices of his county society and was president of his councilor society at the time of his death. He was a graduate of the Arkansas Medical School; practiced medicine in Sevier county for 22 years.

He was an ethical practitioner, and an agreeable friend.

Resolved: That the County Medical Society has lost a valuable member; that the sympathy of the Society be extended to his wife and brothers; that a copy of this resolution be furnished to his wife and to the Journal of the Arkansas Medical Society and that a copy be spread upon the minutes of the Sevier County Medical Society.

Sevier County Medical Society.

THE CLINICAL USE OF SULFAMETHYLTHIAZOL* IN INFECTIONS CAUSED BY STAPHYLOCOCCUS AUREUS: CASE REPORT

By F. H. KROCK, M. D., and
C. T. CHAMBERLAIN, M. D.

Fort Smith

(The authors wish to acknowledge the co-operation of the medical research division of the Winthrop Chemical Company in furnishing quantities of this drug for the study described herein).

While sulfanilamide is by far the most valuable drug in the treatment of infections caused by hemolytic streptococci, all of the available evidence at hand would certainly indicate that sulfapyridine is the drug of choice in the treatment of pneumococcic infections when given either in the form of sulfapyridine by mouth or administered intravenously as sodium sulfapyridine. Up until the present time, sulfapyridine likewise has apparently been the more useful drug in the treatment of infections caused by staphylococci in the form of severe abscess or cellulitis or in the form of staphylococcic septicemia. Toxic reactions, however, especially those having to do with the occurrence of gastro-intestinal disturbances, have proven to be troublesome following the use of sulfapyridine for the types of infection mentioned above.

Recent clinical research with a group of allied compounds containing a radical of the parent compound, sulfanilamide, would indicate tentatively that this latter group is going to prove to be less toxic and more effectual in the management of staphylococci infections. The latest derivation of sulfanilamide to attract attention in the field of chemotherapy is one which Barlow and his associates experimented with in staphylococcus infections; namely, sulfamethylthiazol. In a report by Herrell and Brown* a summary of the significant experiments carried out with this drug both in vitro and in vivo is given, and in addition a clinical case of staphylococcus aureus septicemia which was treated successfully with this drug is reported.

Our personal experience so far has been limited to the use of sulfamethylthiazol, although great interest is being stimulated in the use of an allied compound, sulfathiazol. These two drugs in this latter classification seem to possess in vitro as well as in vivo effectual action against streptococcic, pneumococcic, and staphylococcic infections.

The case to be reported was that of a proven staphylococcic septicemia complicating an upper lip infection in a white, female patient, age 62. Staphylococcus aureus was recovered both from the local lesion on the lip and from the

blood. Sulfamethylthiazol was administered by mouth over a period of five days, during which time all evidence of local inflammatory reaction subsided rapidly and the systemic symptoms disappeared.

REPORT OF CASE

A white, American widow, 62 years of age, was seen for the first time on February 25. Her family, marital and past history was not remarkable. Her general health had been fairly good until forty-eight hours before our first observation, when she noted a small, red, painful pimple at the right angle of the upper lip. Within the course of twenty-four hours, the lesion became so painful that the patient's son "pricked" it with a pin. During the next six hours a diffuse swelling appeared around the initial lesion and extended rapidly to involve the right cheek and the right side of the nose. Patient applied hot salt water packs with little relief. Her temperature was not recorded during the first forty-eight hours of her illness, although she stated that she felt she had had "high fever" but no chills.

On February 26, she was admitted to Sparks Hospital for observation and treatment. Physical examination at this time revealed a blood pressure of 130/90, pulse 100, temperature 100. The right side of the face, and particularly the right upper lip, were diffusely swollen, red, hot and edematous. At the outer angle of the right upper lip, there was a small, red papule about one-fourth centimeter in diameter and surmounted by a small yellow crust. The heart and lungs were clinically negative, and the remainder of the physical examination revealed no significant abnormalities.

In the laboratory, urine examination was negative except for a trace of albumin. Erythrocytes were 3,830,000 and the hemoglobin 78% (Sahli). Leukocytes were 6,900 with 65% neutrophils. A smear from the lesion on the upper lip revealed numerous pus cells and an occasional gram positive coccus. A twenty-four hour culture of material from this smear revealed numerous round, yellow colonies which on microscopic examination proved to be Gram positive cocci occurring in groups. A blood culture taken on February 26 showed at the end of seventy-two hours, several round, white colonies of gram

positive cocci occurring in groups. Sub cultures taken from the original culture and made on Löffler's serum showed again numerous yellow, round colonies.

On February 27, the administration of sulfamethylthiazol by mouth was started in doses of a gram and a half, or $22\frac{1}{2}$ grains, every four hours. Twenty-four hours later patient's temperature was 100 and pulse rate was 90. The temperature level after this day and until her discharge on March 5 was never over 99. On April 2, it dropped to normal and remained at that level until she was dismissed from the hospital.

The local lesion showed definite evidence of regression twenty-four hours after the chemotherapy was started; and on February 29, forty-eight hours later, the swelling in the right cheek and in the region of the nose had subsided completely. On this day the hot compresses were discontinued, and the dose of sulfamethylthiazol was reduced to one gram, or fifteen grains, every four hours. On March 2, the drug was discontinued and on March 5 patient was discharged from the hospital symptom free. The lesion on the upper lip had cleared completely except for the presence of a small area of erythema surrounded by a moderate brawny discoloration of the skin. At no time during the period of administration of the sulfamethylthiazol did the patient experience or complain of any nausea or vomiting.

Red and white cell counts checked at regular intervals revealed no abnormalities that were not present before chemotherapy was started. Repeated urine examinations were within normal limits. Sulfamethylthiazol blood level determination was done on February 28 and found to be .8 of a milligram per 100 cc.

SUMMARY AND CONCLUSIONS: A case of proven staphylococcus aureus septicemia complicating an upper lip infection has been presented. Sulfamethylthiazol was administered early and apparently in sufficient dosage by mouth to bring about a rather spectacular recession of the local and systemic symptoms.

It is worthy of note that this patient at no time showed any high temperature levels and any leukocytosis in spite of the fact that staphylococcus aureus organisms were recovered from the blood by culture before chemotherapy was started. In this one case, toxic side effects were absent, and the patient apparently tolerated the drug without any disturbing gastrointestinal symptoms. The blood level determination is of questionable significance in this par-

ticular case since the drug has had such a limited use clinically that no optimal therapeutic levels have been established as yet.

BIBLIOGRAPHY

- *Herrell, W. E. and Brown, A. E.: The Clinical Use of Sulfamethylthiazol in Infections Caused by Staphylococcus Aureus. Proceedings of the Staff Meetings of the Mayo Clinic 14: 753-758 (Nov. 29) 1939.
1425 North 11th Street.

ARMY EXPERIENCE FOR PHYSICIANS

Medical Reserve Officers are being used to augment the entire Army Medical Service, which includes everything from small unit installations to large Station Hospitals, General Hospitals, and hospitals designed primarily for the treatment of specific types of cases.

Physicians under 35 years of age who are desirous of obtaining extended active duty with the army but who do not hold Reserve commissions are being offered appointments in the Medical Corps Reserve in the grade of 1st Lieutenant, in order to permit them to be placed on such duty. Captains and Lieutenants are at present being offered excellent assignments throughout the continental United States, and it is hoped that authority will be granted to actually permit some officers to go to Hawaii and Panama. The pay and allowances for a married 1st lieutenant amount to approximately \$263 a month; for a single 1st lieutenant to approximately \$225 a month; for a married Captain to approximately \$316 a month; and for a single Captain to approximately \$278 a month. In most cases the above pay and allowances would apply inasmuch as government quarters are not usually available for officers on extended active duty. In the few instances where government quarters are available, the amounts would be \$40, \$60, \$60, and \$80 less per month respectively. In addition, the officer is reimbursed for mileage traveled from his home to his station, and upon completion of his tour of duty is reimbursed similarly for the travel to his home.

Application for one year of active duty, or for appointment in the Medical Corps Reserve with a view to obtaining one year of active duty with the army, should be requested at once by a letter addressed to the Commanding General of the Seventh Corps Area (Mo., Kans., Ark., Iowa, Nebr., Minn., N. D., S. D.) New Federal Bldg., Omaha, Neb. In addition, the application should contain concise information regarding permanent address, temporary address, number of dependents, earliest date available for active duty, and that internship has been (or will be) completed; and it should be accompanied by a report of physical examination recorded on the Army Form W. D. A. G. O. 63, which may be obtained from any Army station. From the group of reserve officers placed on extended active duty since August, 1939, over 25 per cent of those within the age requirements of 32 years of age or less for commission in the Regular Army Medical Corps found military service sufficiently to their liking to cause them to take entrance examinations for the Regular Army.

COMING MEDICAL MEETINGS

Arkansas Medical Society, Fort Smith, April 15-17th, 1940.

American Medical Association, New York, June 10-14th, 1940.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

APRIL is the month in which tuberculosis associations proclaim the importance of the early diagnosis of tuberculosis. Through various channels of publicity, the public is urged to take heed of the early symptoms. They are told also about the advantage of the tuberculin test and the X-ray as means of discovering tuberculosis even before symptoms appear. Physicians play their part by meeting the demand for more prompt and precise diagnosis. Dr. Sweany, who contributes this number of Abstracts, sees clinical tuberculosis through the eyes of the pathologist familiar with end results. An understanding of what lies beneath the often obscure signals of approaching tuberculosis should be valuable to the practitioner whose field of battle is mostly in the sick room.

WHAT THE DOCTOR SHOULD KNOW

After the tubercle bacillus was discovered, tuberculosis was soon found to be a generalized or systemic infection which only gradually becomes focalized in various organs as healing takes place. During the "generalization" phase there may be an ephemeral temperature lasting from two to ten days, after which few symptoms occur until advanced disease appears. The majority of primary infections (about 80 per cent in America) take place in the lungs. The rate of infection varies widely in different countries, even in different communities, but is generally decreasing.

The first, or primary infection in children occurs as varying sized patches of bronchopneumonia in the lung. From the local focus the bacilli follow the lymphatic vessels and form lesions in the various lymph nodes along the course of the lymphatics. The infection may finally reach the left subclavical vein whence it travels to the right side of the heart and becomes disseminated in the lungs. The bacilli many times pass through the pulmonary capillaries into the left side of the heart and from there to the general circulation to become deposited in all organs of the body.

All but an insignificant number of infections due to small dosage heal, but where there has been heavy exposure the lesions heal in only

about 75 per cent of the cases. The lesions that do not heal may slowly spread by a growth or rupture in the bronchi or blood and lymph vessels. The infection may also spread from the lymph node lesions which may overflow and rupture. The bacilli may enter the blood stream, get into the general circulation, and cause a systemic dissemination. The average "latent" or "quiescent" period from the time of infection to the appearance of clinical disease has been found to be ten years.

Primary tubercles of adults on the other hand usually involve the lymph nodes less, have poorer capsules, and tend to localize more in the upper lung lobes. Therefore, the number of protracted primary "sequelar" lesions and exacerbations in the adults are fewer compared to those frequently found in the lymph nodes of children. For the same reason a more rapidly progressive pulmonary process is likely to occur in the adults. In brief, when the adult type produces disease it proceeds rapidly and is confined largely to the lung parenchyma. The average "latent period" is usually about three years.

After the first infection there is an acquisition of "allergy" or hypersensitiveness of the body cells to tuberculin. This sensitization of the body cells is shown by the tuberculin skin reaction. A relative immunity also develops largely inde-

pendent of the allergy, although the latter in moderate degree may contribute to the resistance to infection. In excessive degrees allergy may aggravate the infection. The effects of these changes in the basic nature of the host tend to cause a localization of the process in the body organs and tissues, most of which occur in the lungs. This organ localization only develops gradually and is never complete except in cases that are healing.

The disease may continue as a "progressive primary lesion," an "exacerbation of a primary lesion," or be a much less frequent "new infection from without."

The majority of "reinfection" lesions are found along the subapical bronchi; the posterior upper quarter of both lungs are the sites of predilection in over 90 per cent of the early cases.

On the roentgenogram the lesions appear as small circumscribed or cloudy flecks a few millimeters in diameter.

The infection may spread to the other organs by the blood or lymphatic routes as it usually does during or after the primary infection. Direct implantations of bacilli cause laryngitis, enteritis, cystitis.

Following in the wake of the disease, non-specific "sequelar" lesions occur, including the distressing tracheobronchitis, bronchiectasis, bulous emphysema, and finally heart failure due to fibrous obliteration of the pulmonary capillaries and arterioles.

Apart from the preceding conditions caused directly or indirectly by the tubercle bacillus there is the whole gamut of diseases that may be associated with tuberculosis as a concomitant or associated process. Skill is required to differentiate each one from tuberculosis.

The physician, therefore, seems to be just coming into his own in the diagnosis and treatment of tuberculosis. The medical man in the home has the best opportunity and is in the majority of cases the only one to get the disease under control early. This is a hopeful trend.

In Detroit, Douglas has observed that about 75 per cent of diagnoses of tuberculosis are made by the general practitioners. Pleyte's recent surveys in Wisconsin leave little doubt that the general practitioners can and should play an important role in case-finding. The "contacts" which made up 47.2 per cent of the group had 14.4 times the infection rate as that for the state as a whole. The most important group of all was the group of cases submitted by the practitioners of the state who have been encouraged to send films to the Wisconsin Anti-Tuberculosis Association for consultation. This group of cases was made up of patients who had had a contact with an open case, were ill, or had been or were suspected of being ill. In this group the rate was forty times the average morbidity rate for the state.

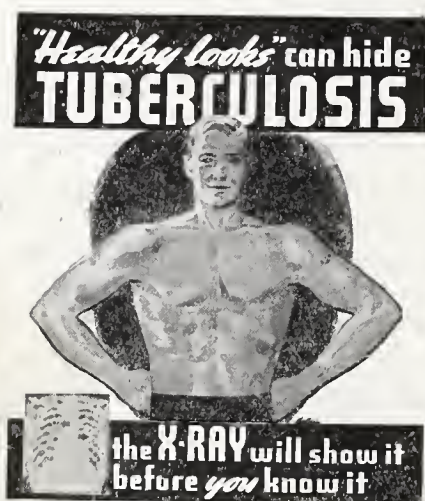
Henry C. Sweany, M. D. From the Research Laboratories of the City of Chicago Municipal Tuberculosis Sanitarium.

• • • • •



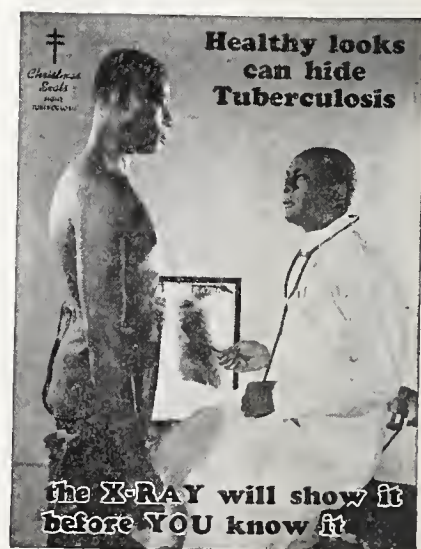
TUBERCULOSIS
before symptoms appear

CHRISTMAS SEALS FIGHT TUBERCULOSIS



the X-RAY will show it
before you know it

Christmas Seals Fight Tuberculosis



the X-RAY will show it
before YOU know it

Reproductions of posters (the originals in colors) used by local tuberculosis associations in the Early Diagnosis Campaign. About eight million pieces of printed matter will be distributed.

THE JOURNAL
OF THE
ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under direction of the Council

W. R. BROOKSHER, M. D., Editor

610 First National Bank Bldg. Fort Smith, Arkansas

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Medical Association.

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NEWS—Our readers are requested to send in items of news,
also marked copies of newspapers containing matter of interest
to the membership.

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY

A. S. BUCHANAN, President	Prescott
H. T. SMITH, President-Elect	McGehee
J. M. PROCTOR, First Vice-President	Hot Springs
B. L. MOORE, Second Vice-President	El Dorado
T. J. STEWART, Third Vice-President	Wynne
R. J. CALCOTE, Treasurer	Little Rock
W. R. BROOKSHER, Secretary	Fort Smith

COUNCILORS

First District—F. D. SMITH	Blytheville
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Eighth District—F. A. CORN, Jr.	Lonoke
Ninth District—J. F. JOHN	Eureka Springs
Tenth District—CLYDE McNEIL	Rogers

EDITORIAL

THE ANNUAL SESSION

This issue of The Journal contains the full program for the 65th Annual Session of the Arkansas Medical Society to be held at the Goldman Hotel, Fort Smith, April 15th, 16th and 17th. Reference to the scientific program will show that a widely diversified group of addresses have been planned, certain to prove of interest and value to each member of the Society. Guest speakers are known authorities in their respective fields. Speakers from the Society have chosen their subjects well and an opportunity is afforded for all who attend to profit from the program. In addition to the scientific papers, the scientific and commercial exhibits offer much to the physician and will be the source of many

new ideas. The Sebastian County Medical Society has arranged a program of entertainment which will bring much to the lighter moments of the session. The physicians of Sebastian County are preparing for a record-breaking attendance. Members of the Society should attend, take part in the discussions, meet their colleagues, and, in general, derive all possible profit from the meeting which is arranged for their benefit.

WHAT IS THE WOMEN'S FIELD ARMY?

"Early Cancer is Curable. Fight it with knowledge"—This is the slogan of the Women's Field Army, the volunteer educational organization that is being built throughout the country under the auspices of the American Society for the Control of Cancer. Under the direction of the state commander, Mrs. S. J. Wolfermann, Fort Smith, local units of the Field Army are formed in cities, towns, and counties. These units are centers for the spread of information on cancer and are directly under the supervision of the local cancer committees of the county medical societies.

The work of the Field Army in Arkansas has been divided into ten districts to conform to the districts of the Medical Society. Each district is supervised by a vice-commander and small groups of counties in the district, by majors. The campaign in each county is organized by a captain and her lieutenants. The State Commander is directly responsible to the cancer committee of the Arkansas Medical Society and each vice-commander to the committee member in her district.

It is urged that each member of the Arkansas Medical Society cooperate to the fullest extent in helping these volunteer workers in their educational campaign. An enlightened public opinion can do much to bring early cancer cases to diagnosis and treatment.

The Army is beginning its fourth annual enlistment in April. Both men and women may enroll and the fee is one dollar. Seventy per cent of the enrollment fee will be spent in the state under the direction of the state executive committee and thirty per cent will be returned to the American Society for the Control of Cancer. Let us meet this responsibility so that Arkansas may take her place among the states of low cancer mortality.—Adopted from Florida Medical Association, March, 1940.

Preliminary Program and Announcements

OF THE

SIXTY-FIFTH ANNUAL SESSION OF THE

ARKANSAS MEDICAL SOCIETY

FORT SMITH

APRIL 15, 16, 17, 1940

HEADQUARTERS—GOLDMAN HOTEL

OFFICERS

PRESIDENT—A. S. Buchanan, Prescott.
PRESIDENT-ELECT—H. T. Smith, McGehee.
FIRST VICE-PRESIDENT—J. M. Proctor, Hot Springs.
SECOND VICE-PRESIDENT—B. L. Moore, El Dorado.
THIRD VICE-PRESIDENT—T. J. Stewart, Wynne.
TREASURER—R. J. Calcote, Little Rock.
SECRETARY—W. R. Brooksher, Fort Smith.
COUNSEL—Hon. Peter A. Deisch, Helena.
SERGEANT-AT-ARMS—T. P. Foltz, Fort Smith.

COUNCILORS AND COUNCILOR DISTRICTS

R. B. Robins, Camden, Chairman.
Euclid Smith, Hot Springs National Park, Secretary.

FIRST DISTRICT—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, F. D. Smith, Blytheville. Term of office expires 1941.

SECOND DISTRICT—Clebune, Fulton, Independence, Izard, Jackson, Sharp, Stone and White counties. Councilor, M. C. Hawkins, Jr., Searcy. Term of office expires 1940.

THIRD DISTRICT—Arkansas, Cross, Lee, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, J. O. Rush, Forrest City. Term of office expires 1941.

FOURTH DISTRICT—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, S. W. Douglas, Eudora. Term of office expires 1940.

FIFTH DISTRICT—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, R. B. Robins, Camden. Term of office expires 1941.

SIXTH DISTRICT—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, Don Smith, Hope. Term of office expires 1940.

SEVENTH DISTRICT—Clark, Garland, Hot Spring, Montgomery and Saline counties. Councilor, Euclid Smith, Hot Springs National Park. Term of office expires 1941.

EIGHTH DISTRICT—Conway, Faulkner, Grant, Lonoke, Perry, Pope, Pulaski, Van Buren and Yell counties. Councilor, F. A. Corn, Jr., Lonoke. Term of office expires 1940.

NINTH DISTRICT—Baxter, Boone, Carroll, Marion, Newton and Searcy counties. Councilor, J. F. John, Eureka Springs. Term of office expires 1941.

TENTH DISTRICT—Benton, Crawford, Franklin, Johnson, Logan, Madison, Sebastian, Scott and Washington counties. Councilor, Clyde McNeil, Rogers. Term of office expires 1940.

STANDING COMMITTEES

(Appointments expire with annual session of the year indicated.)

SCIENTIFIC WORK—R. B. Robins, Camden, Chairman (1942); Ralph Sloan, Jonesboro (1940); E. C. Moulton, Fort Smith (1941); W. R. Brooksher, Fort Smith (1941).

MEDICAL LEGISLATION—Joe F. Shuffield, Little Rock, Chairman (1940); L. J. Kosminsky, Texarkana (1940); S. J. Allbright, Searcy (1940); Euclid Smith, Hot Springs National Park (1942); W. G. Hodges, Malvern (1942); M. L. Norwood, Lockesburg (1941); W. G. Eberle, Fort Smith (1941).

HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Little Rock, Chairman (1940); A. M. Elton, Newport (1940); C. J. Steed, Gurdon (1942); J. B. Askew, Batesville (1942); E. J. Munn, El Dorado (1941); H. Fay H. Jones, Little Rock (1941).

MEDICAL EDUCATION AND HOSPITALS—S. J. Allbright, Searcy, Chairman (1942); J. W. Amis, Fort Smith (1941); Alan G. Cazort, Little Rock (1941).

PUBLIC RELATIONS—W. T. Wootton, Hot Springs National Park, Chairman (1942); S. C. Fulmer, Little Rock (1940); G. R. Siegel, Clarksville (1941).

MEDICAL ECONOMICS—J. G. Gladden, Harrison, Chairman (1940); T. O. Guthrie, Smithville (1940); J. B. Hesterly, Prescott (1942); A. F. Hoge, Fort Smith (1942); F. A. Corn, Lonoke (1941); Paul Mahoney, Little Rock (1941).

SCIENTIFIC EXHIBIT—C. S. Moss, Hot Springs National Park, Chairman (1941); A. H. Hathcock, Fayetteville (1940); G. G. Woods, Huntington (1942); E. H. White, Little Rock (1940).

NECROLOGY—L. T. Evans, Batesville, Chairman (1941); E. E. Barlow, Dermott (1940); C. A. Archer, DeQueen (1942).

CANCER CONTROL—Fred H. Krock, Fort Smith, Chairman (1940); J. S. Stell, Hot Springs National Park (1942); L. M. Smith, Russellville (1941); F. A. Hughes, Prescott (1942); Jeff Baggett, Prairie Grove (1942).

SPECIAL COMMITTEES

MATERNAL AND CHILD WELFARE—S. A. Thompson, Camden, Chairman; Don Smith, Hope; Charles Wallis, Little Rock; W. F. Adams, Fort Smith; W. T. Lowe, Pine Bluff; P. H. Phillips, Ashdown; J. H. Fowler, Harrison; W. P. Cooksey, Magnolia; Thos. Douglass, Ozark; Earle H. Hunt, Clarksville; G. M. Love, Rogers; J. W. Branch, Hope; Clyde Rodgers, Little Rock; W. A. Snodgrass, Jr., Pine Bluff; R. L. Bryant, Arkadelphia.

HEART—A. A. Blair, Fort Smith, Chairman; A. G. Sullivan, Hot Springs National Park; Alan A. Gilbert, Fayetteville; S. C. Fulmer, Little Rock.

CONTROL OF SYPHILIS—D. W. Goldstein, Fort Smith, Chairman; Louie G. Martin, Hot Springs National Park; O. C. Melson, Little Rock; Hoyt Allen, Little Rock.

POSTGRADUATE STUDY—D. A. Rhinehart, Little Rock, Chairman; Joe F. Shuffield, Little Rock; W. W. Verser, Harrisburg; E. E. Barlow, Dermott; L. M. Lile, Hope; C. L. McNeil, Rogers; M. C. Hawkins, Jr., Searcy; W. O. Arnold, Fort Smith; S. J. Wolfermann, Fort Smith; E. J. Munn, El Dorado; H. W. Hundling, Little Rock; M. J. Kilbury, Little Rock; H. E. Mobley, Morrilton; Earle H. Hunt, Clarksville; L. J. Kosminsky, Texarkana; H. Fay H. Jones, Little Rock; R. M. Eubanks, Little Rock; C. S. Holt, Fort Smith; H. King Wade, Hot Springs National Park; Paul Mahoney, Little Rock.

AUXILIARY—C. K. Townsend, Arkadelphia; L. T. Evans, Batesville; E. E. Barlow, Dermott.

STUDY OF MIDWIFERY—J. B. Jameson, Camden, Chairman; Fount Richardson, Fayetteville; M. C. Hawkins, Jr., Searcy; J. M. Lemons, Pine Bluff.

LIASON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—A. C. Shipp, Little Rock, Chairman; H. A. Stroud, Jonesboro; Guy Hodges, Rogers; A. B. Dickey, State Sanatorium.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY—Frank Vinsonhaler, Little Rock, Chairman; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. E. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahoney, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnson, Batesville; S. J. Wolfermann, Fort Smith.

LOCAL COMMITTEES

Sebastian County Medical Society

D. W. GOLDSTEIN, General Chairman

ENTERTAINMENT—I. F. Jones, Chairman, A. A. Blair, Fred Krock, J. E. Stevenson.

EXHIBITS, COMMERCIAL—Ralph Crigler, Chairman; S. P. Stubbs, Rogers; Hederick, L. M. Henry, Jim Johnson, A. B. Dickey.

EXHIBITS, SCIENTIFIC—Ralph E. Weddington.

ARRANGEMENTS—R. T. Smith, Chairman; M. H. Scott, W. M. Woods.

RECEPTION—A. F. Hoge, Chairman; W. O. Arnold, M. E. Foster, W. F. Rose, S. P. McConnell, C. W. Hall, G. G. Woods, R. R. Nowlin, J. D. Riley.

MEMORIAL SERVICES—C. S. Means, Chairman; C. B. Billingsley, C. H. Kennedy, B. L. Ware, J. H. Benefield, O. R. Honomichl.

FINANCE—E. C. Moulton, Chairman; C. S. Holt, S. J. Wolfermann, W. G. Eberle, Hugh Johnson.

GOLF—H. H. Smith, Chairman; J. E. Stevenson.

PUBLICITY—T. P. Foltz, Chairman; C. T. Chamberlain, W. F. Adams.

HOTELS—J. W. Amis, Chairman; R. E. Weddington, J. S. Coffman.

TRANSPORTATION—Jeff Southard, Chairman; R. E. Weddington, C. E. Benefield, P. D. Yankoff, Louise Henry.

ANNOUNCEMENTS

REGISTRATION

The registration desk will be located in the lobby of the Goldman Hotel and will be open from 8:00 A. M. to 5:00 P. M., April 15th and 16th. The desk will also be open Sunday afternoon, April 14th, from 3:00 to 5:00 P. M. and April 17th, from 8:00 A. M. to 1:30 P. M. Delegates are requested to register as early as possible, presenting credentials at the time of registration. Members and visitors are also requested to register and receive the official badge and program. Admission to all sessions will be by badge. Bring your 1940 membership card to facilitate registration. Members of the American Medical Association from any state may register as guests.

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society, including the Past-Presidents will meet at noon each day in Room 116, mezzanine floor, Goldman Hotel, immediately following the adjournment of the morning session.

PAST-PRESIDENT'S BREAKFAST

The Past-Presidents of the Society will convene in annual breakfast session, Wednesday, April 17th, at 7:30 A. M. in Room 116, mezzanine floor, Goldman Hotel.

GOLF

The Dewell Gann, Jr. trophy cup having become the permanent possession of H. King Wade of Hot Springs National Park, Dr. Wade has offered the H. King Wade cup for contest at the annual session of the Society. The tournament will be conducted according to announcements made during the session. Each player is requested to bring his club handicap with him as the tournament will be played according to these official handicaps.

ALUMNI REUNIONS

Announcement has been received of the following reunions, further details of which will be given during the sessions.

Alumni Association of the University of Arkansas School of Medicine, Monday evening, April 15th.

Alumni Luncheon, Tulane University School of Medicine, Ward Hotel, Tuesday, April 16th.

ARKANSAS STATE PEDIATRIC SOCIETY

The Arkansas State Pediatric Society will meet at 10:00 A. M., Monday, April 15th, in Room 103, mezzanine

floor, Goldman Hotel. Dr. S. G. Wolfe, Shreveport, the guest speaker, will address the meeting on "The Use of Convalescent Serum in the Treatment of Communicable Diseases," and will conduct a round table discussion. A luncheon will follow the scientific program.

ENTERTAINMENT

Tuesday evening, April 16th, the Sebastian County Medical Society will be hosts to members and visitors at a buffet supper and dance to be held in the Goldman Hotel.

PROGRAM HOUSE OF DELEGATES

First Meeting, Goldman Hotel, April 15th, 9:00 a. m.

Meeting called to Order by A. S. Buchanan, President.
Calling Roll of Delegates.
Report of Credentials Committee.
Introduction of Fraternal Delegates.
Adoption of Minutes of the Sixty-fourth Annual Session as published in the June, 1939, issue of The Journal of the Arkansas Medical Society.
Appointment of Reference Committee.
President's Address to the House of Delegates.

REPORT OF COMMITTEES

SCIENTIFIC WORK—R. B. Robins, Chairman.
MEDICAL LEGISLATION—Jos. F. Shuffield, Chairman.
HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Chairman.
MEDICAL EDUCATION AND HOSPITALS—S. J. Allbright, Chairman.
PUBLIC RELATIONS—W. T. Wootton, Chairman.
MEDICAL ECONOMICS—J. G. Gladden, Chairman.
SCIENTIFIC EXHIBIT—C. S. Moss, Chairman.
NECROLOGY—L. T. Evans, Chairman.
CANCER CONTROL—Fred H. Krock, Chairman.
HEART—A. A. Blair, Chairman.
STUDY OF MIDWIFERY—J. B. Jameson, Chairman.
MATERNAL WELFARE—S. A. Thompson, Chairman.
POSTGRADUATE STUDY—D. A. Rhinehart, Chairman.
AUXILIARY—W. H. Mock, Chairman.
CONTROL OF SYPHILIS—D. W. Goldstein, Chairman.
HISTORY OF ARKANSAS MEDICAL SOCIETY—Frank Vinsonhaler, Chairman.
LIASON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—A. C. Shipp, Chairman.
AUXILIARY—C. K. Townsend, Chairman.
REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY—D. L. Owens, Secretary.
REPORT OF DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION—E. E. Barlow.
REPORT OF THE COUNCIL—R. B. Robins, Chairman.
REPORT OF THE TREASURER—R. J. Calcote.
REPORT OF THE SECRETARY—W. R. Brooksher.
REPORT OF COUNSEL—Hon. Peter A. Deisch.
REPORT OF FRATERNAL DELEGATES.
NEW BUSINESS.

The following amendment to the Constitution and By-Laws of the Society was proposed at the annual session

of 1939, and has been published in the March and April, 1940, issues of The Journal:

Chapter VIII, Section 2: To amend the first sentence which reads: "The Committee on Scientific Work shall consist of three members of which the Secretary shall be one," by deleting the word "one" and substituting therefor, the word, "Chairman."

Selection of the Nominating Committee.

SCIENTIFIC SESSION

MONDAY, APRIL 15TH, 1:30 P. M.

CALLING THE SOCIETY TO ORDER—A. S. Buchanan, President.
INVOCATION—Rev. Paul Desmond, Immaculate Conception Church.
ADDRESS OF WELCOME—Hon. Jim Jordan, Mayor of Fort Smith.
ADDRESS OF WELCOME ON BEHALF OF THE SEBASTIAN COUNTY MEDICAL SOCIETY—H. C. Dorsey, President.
RESPONSE ON BEHALF OF THE ARKANSAS MEDICAL SOCIETY—Ira W. Ellis, Monette.
PRESIDENT'S ANNUAL ADDRESS—A. S. Buchanan, Prescott.
"Gall Bladder Disease," Clifford J. Barborka, Chicago.
"Heart Disease and Work," A. A. Blair, Fort Smith.
"Vaccines and Serums in Prophylaxis and Treatment of Acute Diseases," S. G. Wolfe, Shreveport.
"The Tuberculin Patch Test: A Comparative Study of the Mantoux and the Tuberculin Patch Tests," Ralph E. Weddington and William O. Arnold, Fort Smith.
"The National Physicians' Committee for Extension of Medical Service," E. H. Skinner, Kansas City.

PUBLIC MEETING

MONDAY, APRIL 15TH, 8:00 P. M.

Junior High School Auditorium
North 15th Street at Grand Avenue

CALLING THE MEETING TO ORDER—H. C. Dorsey, President, Sebastian County Medical Society.
INVOCATION—Rabbi Samuel Teitelbaum, United Hebrew Congregation.
INTRODUCTION of A. S. Buchanan, President, Arkansas Medical Society, Prescott.
ADDRESS—Mrs. Rollo K. Packard, President, Woman's Auxiliary to the American Medical Association, Chicago.
Address—"The Priceless American Heritage of Health and Happiness," E. H. Skinner, Kansas City.
BENEDICTION—Rev. J. W. Hickman, First Presbyterian Church.

MEMORIAL SESSION

TUESDAY, APRIL 16TH, 8:00 A. M.

INVOCATION—Rev. L. L. Evans, First Methodist Church.
VOCAL SOLO—"My Friend" (Malott)
Mr. Charles McGill,
Mrs. Charles McGill, Accompanist.
Reading of names of deceased members—E. E. Barlow, Dermott.
ADDRESS—L. T. Evans, Batesville, Chairman, Committee on Necrology.

VOCAL SOLO—"In My Father's House Are Many Mansions"

Mr. Charles McGill,

Mrs. Charles McGill, Accompanist.

BENEDICTION—Rev. Elbert Hefner, Central Presbyterian Church.

IN MEMORIAM

Alvin L. Jobe, Little Rock, May 26, 1939.

Oscar Jacob MacLaughlin, Hot Springs National Park, June 2, 1939.

William Vincent Laws, Hot Springs National Park, June 8, 1939.

Thomas Lee McDonald, Hope, June 26, 1939.

James Homer Buckley, Fort Smith, July 31, 1939.

George Thomas Laman, Cave City, August 8, 1939.

Fred Raines Morrow, Fayetteville, August 15, 1939.

John H. Colay, Morrilton, August 16, 1939.

Milton Augustus Hardin, Nophlet, September 4, 1939.

Edwin Justus Haster, Dardanelle, September 24, 1939.

Ervin Layman Matthews, Morrilton, October 17, 1939.

Thomas C. Neece, Walnut Ridge, October 17, 1939.

Edwin Thomas Brown, Marvell, October 28, 1939.

Alexander Crump Kirby, Little Rock, November 4, 1939.

Frank O. Rogers, Little Rock, November 8, 1939.

William Frank Akin, Branch, November 13, 1939.

William Columbus Haltom, Jonesboro, November 19, 1939.

Lee Vallette Parmley, Little Rock, December 26, 1939.

Ernest Darnall, Colt, January 2, 1940.

James Erwin Hardaway, Lynn, January 4, 1940.

Emmett A. Pickens, Bentonville, January 29, 1940.

Jesse Clyde Graves, Lockesburg, February 2, 1940.

Thomas E. Benton, Lonoke, February 5, 1940.

William Mack Majors, Paragould, February 14, 1940.

Charles E. Hurley, Bentonville, February 24, 1940.

George Albert Causey, Swifton, March 20, 1940.

William L. Harper, Junction City, March 22, 1940.

SCIENTIFIC SESSION

TUESDAY, APRIL 16TH, 9:30 A. M.

"The Management of Normal Labor," G. L. Kimball, DeQueen.

"The Problems of Chronic Arthritis: Certain Features of its Management," C. H. Lutterloh, Hot Springs National Park.

"The X-ray Examination in Ileus and Intestinal Obstruction," I. H. Lockwood, Kansas City.

"Carcinoma of the Stomach," Henry G. Hollenberg, Little Rock.

"The Treatment of Functional Uterine Bleeding," Fred H. Krock, Fort Smith.

SCIENTIFIC SESSION

TUESDAY, APRIL 16TH, 1:30 P. M.

"What do the Ophthalmologist and General Practitioner Expect of Each Other?" Meyer Wiener, Saint Louis.

"Liver Function in Surgical Disease," Carl A. Rosenbaum, Little Rock.

"The Climacteric: Some Phases in Its Management," William P. Sadler, Minneapolis.

"Surgical Relief of Pain," J. Jay Keegan, Omaha.

"The Diagnosis and Treatment of Ectopic Pregnancy," Berry L. Moore, El Dorado.

"Endoscopy," Paul L. Mahoney, Little Rock.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

TUESDAY, APRIL 16TH, 9:00 A. M.

Room 108, Mezzanine Floor, Goldman Hotel

CHAIRMAN—Virgil L. Payne, Pine Bluff.

VICE-CHAIRMAN—Jack Agar, Little Rock.

SECRETARY—Raymond C. Cook, Little Rock.

"The Management of Mastoid Complications," John J. Shea, Memphis.

"Fundus Examination as an Aid in Diagnosis and Prognosis of General Disease," James B. Stanford, Memphis.

"Some Points of Technic in Surgery of the Eye," Meyer Wiener, Saint Louis.

Business session.

Luncheon with round table discussion following the program.

SCIENTIFIC SESSION

WEDNESDAY, APRIL 17TH, 8:30 A. M.

"Premature Detachment of the Normally Situated Placenta," Ralph M. Sloan, Jonesboro.

"The Advantages of Serum Transfusions over other Intravenous Vehicles," John H. Connell, New Orleans.

"A Study of Open Intrapleural Pneumolysis," Harvey Shipp, Little Rock.

"Prevention of Abdominal Adhesions," J. K. Donaldson, Little Rock.

"The Indications for and the Relative Efficiency of Various Suture Materials," Joe B. Wharton, Jr., El Dorado.

"Medical Education in the United States 1934-1939," Stuart P. Cromer, Little Rock.

"Cesarean Section," Chas. R. Henry, Little Rock.

HOUSE OF DELEGATES

WEDNESDAY, APRIL 17TH, 1:30 P. M.

CALLING THE MEETING TO ORDER—A. S. Buchanan, president.

ROLL CALL.

REPORT OF NOMINATING COMMITTEE.

ELECTION OF OFFICERS.

President-Elect.

First Vice-President.

Second Vice-President.

Third Vice-President.

Treasurer.

Secretary.

Five Councilors.

Delegate to the American Medical Association.

Alternate to the American Medical Association.

REPORT OF THE REFERENCE COMMITTEE.

REPORT OF COMMITTEES.

NEW BUSINESS.

ADJOURNMENT.

FINAL GENERAL SESSION

WEDNESDAY, APRIL 17TH

(Immediately after adjournment of the House of Delegates)

CALLING THE MEETING TO ORDER—A. S. Buchanan, President.

UNFINISHED BUSINESS.

PRESENTATION OF PRESIDENT H. T. SMITH.

PRESENTATION OF THE PRESIDENT-ELECT.

NEW BUSINESS.

SELECTION OF PLACE OF NEXT MEETING.

ADJOURNMENT SINE DIE.

PROCEEDINGS OF SOCIETIES

Garland County Medical Society has elected the following officers: President, C. H. Lutterloh; Vice-president, Foster Jarrell; Secretary-treasurer, W. E. Gray; Delegates, J. M. Proctor, H. King Wade, J. S. Stell, and Alternates, L. G. Martin, L. E. Read, A. H. Tribble.

At the annual meeting of the Arkansas Tuberculosis Association to be held at the Marion Hotel, Little Rock, April 8, Dr. P. P. McCain, superintendent of North Carolina's system of sanatoria, will be the guest speaker. At the medical section in the forenoon he will discuss "The Tuberculin Test," and at the afternoon session he will talk on "The Psychology of the Tuberculosis patient." Other speakers on the medical section will be Dr. J. D. Riley on the "Importance of Early Diagnosis," and Dr. Harvey Shipp on "Surgery in Tuberculosis." All members of the medical profession are specially invited to attend.

The Hot Spring County Medical Society has elected the following officers: President, H. L. Brown; Vice-president, M. D. Prickett; Secretary-treasurer, R. V. McCary; Delegate, W. F. Barrier, and Alternate, W. G. Hodges.

The Fourth Councilor District Medical Society met in dinner session, as guests of the Jefferson County Medical Society, at Pine Bluff February 20th. The Society voted to meet in the future in May and October each year. Speakers were: A. S. Buchanan, Prescott, "Socialized Medicine"; S. P. Cromer, Little Rock, "The University of Arkansas School of Medicine"; H. T. Smith, McGehee, "Organized Medicine in Arkansas"; S. W. Douglas, Eudora, "Recent Progress in Medicine"; and Geo. V. Lewis, Little Rock, "Hyperthyroidism." The following officers were elected: President, C. W. Dixon, Gould; Vice-president, J. H. Hellums, Dumas, and Secretary-treasurer, W. A. Snodgrass, Jr.

W. A. Snodgrass, Jr., Secretary.

The annual banquet session of the Franklin County Medical Society was held at Ozark February 20th. Addresses were made by Fred H. Krock, Fort Smith, "The Treatment of Functional Uterine Bleeding," and D. W. Goldstein, Fort Smith, "Biopsy in the Management of Cancer."

Thos. Douglas, Secretary.

Conway County Medical Society has elected the following officers: President, A. L. Goatcher, Plumerville; Vice-president, E. Close, Jerusalem, and Secretary-treasurer, C. R. Williams, Morrilton.

The Sevier County Medical Society was addressed February 13th by G. L. Kimball, DeQueen, "Complications in Pregnancy," and J. S. Hendricks, DeQueen, "Locomotor Ataxia."

The Arkansas Committee on Appendicitis Campaign for the Southern Medical Association will meet at breakfast in the Goldman Hotel, Fort Smith, Tuesday morning, April 16th, at 7:00 on call by the Chairman, J. K. Donaldson, Little Rock.

Honoring A. S. Buchanan, Pulaski County Medical Society held its annual President's Dinner March 9th. M. A. Blankenhorn, Cincinnati, the guest speaker, addressing the session on "Serum Therapy and Chemotherapy of Lobar Pneumonia."

E. H. White, Secretary.

The Ouachita County Medical Society met in regular monthly session at the Camden Hospital March 7th. Dinner was served by the nurses of the hospital and the following program was given: "The Evolution of Treatment of Pulmonary Tuberculosis," Harvey Shipp, Little Rock, and "Postpartum Hemorrhage," Charles R. Henry, Little Rock.

R. B. Robins, M. D., Secretary.

The Benton County Medical Society met in dinner session March 14th at Bentonville for the following program: "Diseases of the Aged," W. A. Pickens, and "Something New?" J. L. Pickens. George M. Love, Secretary.

The Sebastian County Medical Society was addressed March 12th by F. Redding Hood, "Coronary Artery Disease," and Hugh G. Jeter, "Anemia," both speakers of the University of Oklahoma School of Medicine, Oklahoma City. Delegates elected are: A. F. Hoge and E. C. Moulton; Alternates, Chas. T. Chamberlain and S. J. Wolfermann.

Ralph E. Weddington, Secretary.

The Pulaski County Medical Society was addressed March 18th by Carl A. Rosenbaum on "Liver Functions in Surgical Diseases."

E. H. White, Secretary.

The Arkansas Tulane Annual Luncheon will be held at the Ward Hotel, Fort Smith, at 12 o'clock noon, Tuesday, April 16th. This luncheon will be for the alumni and their families. It is requested that everyone answer the request cards that are being sent out as soon as possible so that some idea can be formed as to the number that will be at the luncheon.

The Pope-Yell County Medical Society met in dinner session at St. Mary's Hospital, Russellville, March 14th, for an address on "Inhalation Therapy," by W. M. Hull, Oklahoma City. Officers elected are: L. Gardner, Russellville, President; J. K. Grace, Belleville, Vice-president, and Brooks Teeter, Russellville, Secretary-treasurer.

Dr. Duff S. Allen, surgeon of St. Louis, Missouri, will give the Third Annual Lectureship at the University of Arkansas School of Medicine under the auspices of Beta Theta chapter of Phi Beta Pi Medical Fraternity, Saturday, April 13, 1940. His subject will be "The Effects of Toxic Goitre on the Heart."

Dr. Allen is Associate Editor of the Journal of Thoracic Surgery, Assistant Professor of Surgery at Washington University School of Medicine, Assistant Surgeon at St. Louis Maternity Hospital, and Visiting Surgeon and Chief of the Unit at St. Louis City Hospital. He is national president of Phi Beta Pi Fraternity.

Besides his specialty, thyroid surgery, Dr. Allen is interested in heart pathology, and he discovered the first direct-vision method of performing operations on the living heart.

K. W. Cosgrove, Little Rock, recently addressed the Bradley County Medical Society on "Diseases of the Anterior Chamber of the Eye."

P. W. Lutterloh and R. C. Shanlever were hosts to the members of the Craighead-Poinsett County Medical Society at a dinner March 7th.

The Sevier County Medical Society was addressed March 12th by Anthony F. Rossetoo, Texarkana, on "The Therapy of Infection by X-ray."

PERSONALS AND NEWS ITEMS

Carl Wilson, formerly of Springfield, Massachusetts, has joined the Holt-Krock Clinic at Fort Smith, as urologist.

Robert F. Hyatt, Shreveport, recently visited relatives in Little Rock.

C. W. Hall has been elected school director at Greenwood.

J. M. Norton, formerly of Donaldson, has accepted appointment on the staff of the State Hospital at Haskell.

A. B. Robertson has been elected a director of the Rison Lions Club.

MARRIED—B. P. Briggs and Mrs. Helen Ruth Dildy, at Little Rock, February 22nd.

Hoyt R. Allen, Little Rock, attended the recent meeting of the Mid-West Proctologic Society at Houston.

Sam Phillips, B. P. Briggs and D. T. Hyatt addressed the Little Rock schools on the Early Diagnosis Campaign of the Arkansas Tuberculosis Association during February.

W. T. Wootton and Euclid M. Smith, Hot Springs National Park, spent a March vacation in Mexico.

S. J. Wolfermann, Fort Smith, addressed the University of Arkansas School of Medicine students on "Socialized Medicine" February 29th.

W. V. Newman has been appointed chairman of the first aid committee of the Pulaski County Chapter of the Red Cross.

A. C. Shipp has been selected as board member from Arkansas on the National Tuberculosis Association.

"Appendicitis: Its Differentiation and Treatment" by Dewell Gann, Jr., Little Rock, appeared in the February issue of The Journal of the International College of Surgeons.

J. F. John addressed the Eureka Springs Rotary Club February 20th on "The Contribution of Medicine to Modern Society."

J. S. Westerfield, Conway, has recovered from an injury sustained several months ago.

R. J. Haley, Jr., Paragould, has recovered from gunshot wounds inflicted by an assailant February 12th.

Ralph M. Sloan recently addressed the Jonesboro Rotary Club on "Rotary Observance Week."

Frank Vinsonhaler, Little Rock, and C. H. Dickerson, Conway, have been elected president and first vice-president, respectively, of the Sons of the American Revolution.

W. B. Grayson, Little Rock, recently addressed the Little Rock Alumni Chapter of the Sigma Chi Fraternity on "The Functions of the State Health Department."

R. M. Eubanks, Little Rock, spent a recent vacation in New Orleans.

S. A. Drennen, Stuttgart, has been elected a district representative of the Arkansas Wildlife Federation.

T. F. Hudson, Luxora, has been elected vice-president of the Mid-South Postgraduate Medical Assembly.

S. J. Wolfermann, Fort Smith, recently addressed the B'Nai B'rith lodge on "Socialized Medicine."

I. G. Jones and G. L. Kimball, DeQueen, were hosts at a luncheon to the physicians in attendance upon the trachoma clinic in that city February 15th.

J. B. Jameson has been elected vice-president of the Camden Chamber of Commerce.

H. J. Mayfield recently addressed the El Dorado Lions Club on "Disease: Its Cause and Prevention."

Fred H. Krock and T. P. Foltz, Fort Smith, have been elected Vice-chairman and Director, respectively, of the Sebastian County Chapter of the Red Cross.

Chas Wallis, Little Rock, attended the recent meeting of the American Academy of pediatrics at Edgewater Park, Mississippi.

C. W. Hall has been elected trustee of the First Baptist Church at Greenwood.

The Arkansas Eugenics Association has elected M. C. Hawkins, Jr., Searcy, medical advisory committee chairman, and John Samuel, Little Rock, clinician.

T. P. Foltz, Fort Smith, addressed the Junior High School P. T. A. March 7th, on "Should Medicine be Socialized on a National Scale?"

M. C. Hawkins, Jr., has let the contract for a hospital and clinic building at Searcy.

Members of the Greene County Medical Society have been granted commissions as special officers.

Byron L. Robinson, Little Rock, attended the American Association of Anatomists at Louisville in March.

W. C. Langston, Little Rock, attended the American Society of Biological Chemists at New Orleans March 13th-16th.

D. E. White and David Levine, El Dorado, recently attended the Tulane Clinics in New Orleans.

W. A. Snodgrass, Jr., addressed the Pine Bluff Reserve Officers' Association recently on "Physical Requirements of Soldiers."

I. G. Jones and G. L. Kimball have leased the Childress Hospital at DeQueen and will operate the institution as the DeQueen General Hospital.

Frank Vinsonhaler has been elected president of the Little Rock chapter of the Columbia University Alumni Association.

E. F. Ellis recently addressed the Fayetteville Kiwanis Club on "Practice of Medicine in Northwest Arkansas."

F. S. McGuire, Clarendon, addressed the Brinkley P. T. A. March 7th.

Chas. R. Henry, Little Rock, has resigned as full-time Professor of Obstetrics and Gynecology at the University of Arkansas School of Medicine, but will remain on part-time basis with the department.

J. W. Sexton has moved from Mt. Judea to Dover.

A. S. J. Clarke, Ozark, addressed the Alma P. T. A. March 14th.

J. K. Grace formerly of Arkadelphia, has located at Belleville.

The following have been elected school directors: J. B. Jameson, Camden; A. A. Blair, Fort Smith, and Howell Brewer, Hot Springs National Park.

F. A. Hughes, formerly of Prescott, has accepted a position with the Davidson County Tuberculosis Hospital, Nashville, Tennessee.

Sam G. Daniel, Marshall, has retired from active practice.

PROPOSED AMENDMENT TO THE BY-LAWS

The following amendment to the By-Laws was presented to the Sixty-fourth Annual Session of the Society at Hot Springs National Park, May 10th, 1939, and is published here in accordance with the constitutional provision which requires its publication in The Journal on two occasions. The proposed amendment was previously printed in the March, 1940, issue.

Chapter VIII, Section 2: To amend the first sentence which reads: "The Committee on Scientific Work shall consist of three members of which the Secretary shall be one," by deleting the word "one" and substituting therefor, the word, "Chairman."

OBITUARY

CHARLES E. HURLEY, aged 72 years, died at his home in Bentonville February 29th. A graduate of the University of Arkansas School of Medicine in 1892, he was the son, and later professional partner of his father, the late T. W. Hurley, who was president of the Arkansas Medical Society in 1884-1885. For 10 years he served the Benton County Medical Society as secretary and had been both city and county health officer. Other interests included membership in the York Rite Masonic bodies and the Knights of Pythias. Surviving relatives are three sisters.

RANDOM THOUGHTS OF THE SECRETARY

February 20th. A capacity crowd attends the annual festive session of the Franklin County group where scientific discourse of merit is interspersed with the heckling which is so characteristic of this section. Krock and Goldstein provide the formal program, Chamberlain foregoing the opportunity to discuss pneumonia for the more-desired privilege of philosophizing. Earle Hunt presents a urological discussion having to do with the pathological variations of the normal function of micturition, a paper which should receive wider circulation for its comprehensive analysis. There being but two papers, Foltz is heard but twice as a discussant.

February 23rd. With the Wolfermanns attending that grand old melodrama, "The Drunkard," where merriment is great with much hissing and booing of the villain and great applause to the noble heroine. In the audience a goodly number of the local medical profession, intent upon the teaching of the evils of demon rum. After the curtain away to Sid's and Elizabeth's where we further our knowledge of the subject with authoritative information direct from Jamaica and add Montego Bay, Jamaica, to our list of places deservedly to be visited.

February 25th. At the circus winter quarters this afternoon, we see a most unusual spectacle when a lion is led outside for sunshine, the trainer stumbles and falls, whereupon the call of the jungle comes to the beast, leaping as a tawny streak across some ten feet, dragging the trainer, and seizing a small Shetland pony in massive jaws. The pony instinctively realizing the horror of its plight, fights with all its strength by pawing at the beast, but it required the combined efforts of several men and the unrestrained blows of an iron pipe to break the lion's hold, the pony emerging from the conflict in better shape than was to be expected. This unexpected jungle scene has cooled in considerable degree that oft-expressed desire of the youngster's to "go to Africa."

February 27th. As it must to many a man, appendicitis strikes Chamberlain, who, after a personal analysis of the problem and with his postoperative orders duly proclaimed, places himself in the hands of the surgeons for this adventure. Twenty-four hours later, and even much less, there is undeniable evidence that a mere laparotomy will not suffice to curb his loquaciousness as his tumultuous career carries on in recumbency, its vigor unchecked.

February 29th. Reading this month's bulletin from the state welfare department, the introduction devoted to making a case for Carl Bailey and left in wonderment over it all. We do not claim any great astuteness in seeing the shape of things to come when we compare the recent Florida speeches of the governor with those made in his 1937 campaign but we do not quite comprehend the welfare build-up. Further, we hope that the welfare department will come to the realization that in things medical, the greatest good to the greatest number will come from whole-hearted cooperation with the medical profession.

March 1st. Mrs. H. T. Smith graciously wishes us the best of everything in a charming Doctor's Day message. This Auxiliary activity is most commendable and will surely make every doctor seek to be a better man.

March 3rd. 3-3-33 is seven today and attains the bicycle age, its mastery attended with a series of spills and falls such as only a seven-year old can take and keep going. The day waning, he successfully negotiates

the entire lot in one uninterrupted round trip, demonstrating that the younger generation takes hold better than its parents as many, many years ago, we did much less with our first bicycle. Realizing more and more, however, that childhood's days are too brief and fleeting. Seven years of great joy with this youngster, yet all too soon will our days filled with his cheer and presence be but memory as he takes his place in the outside world.

March 5th. The ubiquitous Fishbein comes to town telling the folks of medicine and economics in these days of stress, it being all to their liking and redounding greatly to the esteem of the local profession.

Subsequently, Wolferrmann is a beneficent host and the talk goes from quackery to metrazol, from the need for practitioners in rural areas to a practitioner who poses as a country doctor, from Nobel prize winners to refugee authors, and so on, with much conviviality and fellowship. Thence to that outpost of the Kansas City Southern in eastern Oklahoma where we deliver Pepys to a grinning Pullman porter who has doubtless carried him many other times.

March 6th. Visiting Chamberlain, allegedly convalescent at home, down the stairs for the first time today, and again marveling that, except for a brief interlude of anesthesia, the appendectomy has not given any rest to his vocal cords.

March 9th. With the Jones' to the "Ice Follies of 1940" at Tulsa, the most gorgeous and rhythmic spectacle the amusement world has yet presented to our view. With military precision of utmost exactness, colorfully garbed, the chorus performed its maneuvers while the gliding grace which accompanies expert human endeavor on ice skates is a never-ending thrill as the stars happily perform. No more beautiful scene is there than the swing time waltz number, some 5,000 persons feeling as we do, insisting on repeated encores.

March 11th. The affairs of the coming state meeting engage our attention this day and we note that with the years they increase in number. Among the day's accumulation is that bright philosophy said to be peculiar to the hound dog.

March 14th. With the entertaining diversions of Goldstein, Chamberlain and Wilson as an additional incentive, we visit the Pope-Yell County Medical Society for the first time in many a day, enjoying, as on many a past occasion, the wholesome cordiality with which we are greeted at St. Mary's and are pleased to see Bob Smith genial and happy as always when gathered with a group of doctors. Alan Cazort, alert for ideas, on deck with many a wise crack, none aimed at us for some undiscovered reason. Roy Millard retired as secretary, one of those things we never expected. Welcoming home to private practice, Grace, late of the health service, and wishing him well in his former location. The return trip accomplished with much less spontaneity of conversation, particularly from Chamberlain, who assumes most unheard-of attitudes as he sleeps the miles away to finally cross his own threshold as a confirmed somnambulist.

March 17th. On this Irish day we travel over and about the San Bois mountains of eastern Oklahoma, dining al fresco in Robbers' Cave State Park near Wilburton, where winds do blow as across the western part of the state. Passing through many a small town of familiar name yet never before viewed except from the windows of a Fort Smith and Western train, Foltz's railroad now marked by a right-of-way upon which ties are piled in scattered manner, but from which all steel has been removed.

NOTICE—MEDICAL TECHNOLOGISTS

At the request of the Surgeon General of the Army and in compliance with its policy of cooperation with both the Army and Navy, the American Red Cross, as an expansion of its peace-time service for the military forces, has undertaken the enrollment of various types of medical technologists who are willing to serve in the medical departments of the Army and Navy if and when their services are required at the time of a national emergency.

Persons with the following qualifications will be enrolled:

- Chemical Laboratory Technicians (male)
- Dental Hygienists (male and female)
- Dental Mechanics (male)
- Dietitians (male and female)
- Laboratory Technicians (male and female)
- Meat and Dairy Hygienists (Inspectors) (male)
- *Nurses (male)
- Occupational Therapy Aides (male and female)
- Orthopedic Mechanics (male)
- Pharmacists (male and female)
- Physical Therapy Technicians (Aides) (male and female)
- Statistical Clerks (male and female)
- X-Ray Technicians (male and female)

*This group will not be members of the Army or Navy Nurse Corps which under basic law are limited to females, but will be used as technologists for service auxiliary thereto.

General qualifications for enrollment are as follows:

1. Citizens of the United States.
2. Ages 21-45 years (Army); 18-35 (Navy—men only).
3. Physically qualified. Applicants must pass a satisfactory physical examination, according to standards set respectively by the Army and Navy Medical Departments.
4. Women applicants must be unmarried.
5. All applicants must express a willingness to serve as a technologist in time of a national emergency.

Male technologists will be eligible for enlistment in the Army as non-commissioned officers in the grades of sergeant, staff sergeant, or technical sergeant. Women technologists, and men who do not qualify physically, will be eligible for employment by the Army as civilians.

For the Navy, male technologists will be eligible for enlistment in the Naval Reserve as Petty Officers—Pharmacist's Mates 3d, 2nd, and 1st, Class and Chief Pharmacist's Mate (acting appointment). Women technologists are not eligible for service in the Navy under present plans.

The Medical Department of the Army will require a considerable number of technologists in each of the above named groups. The Navy Medical Department requirements will be similar except for dietitians, occupational therapy aides, orthopedic mechanics and dairy and food hygienists (inspectors) who will not be needed. Notwithstanding the maintenance of this enrollment, the Navy also desires peace-time enlistment in the U. S. Naval Reserve, and male technologists who wish to enlist in the Naval Reserve are urged to communicate direct with the Commandant of the Naval District in which they reside. The address of their Commandant will be furnished upon request.

Technologists who qualify according to these general standards and who are willing to enroll for service as outlined above should communicate with The American National Red Cross, Washington, D. C.

PRELIMINARY PROGRAM AND ANNOUNCEMENTS WOMAN'S AUXILIARY

TO THE ARKANSAS MEDICAL SOCIETY SIXTEENTH ANNUAL MEETING FORT SMITH, ARKANSAS

APRIL 15, 16 AND 17, 1940

HEADQUARTERS: GOLDMAN HOTEL

OFFICERS

PRESIDENT—Mrs. Charles E. Kitchens, DeQueen.
PRESIDENT-ELECT—Mrs. Alfred Hathcock, Fayetteville.
FIRST VICE-PRESIDENT—Mrs. Loyce Hathcock, Fayetteville.
SECOND VICE-PRESIDENT—Mrs. Charles H. Lutterloh, Hot Springs National Park.
THIRD VICE-PRESIDENT—Mrs. E. D. McKnight, Brinkley.
FOURTH VICE-PRESIDENT—Mrs. Calvin A. Churchill, Batesville.
SECRETARY—Mrs. Pierre Redman, Mena.
TREASURER—Mrs. S. C. Fulmer, Little Rock.
HISTORIAN—Mrs. C. W. Garrison, Little Rock.
PUBLICITY SECRETARY—Mrs. Harry E. Murry, Texarkana.
PARLIAMENTARY REFEREE—Mrs. H. King Wade, Hot Springs National Park.

ADVISORY BOARD

Dr. C. K. Townsend, Arkadelphia.
Dr. L. T. Evans, Batesville.
Dr. E. E. Barlow, Dermott.

COUNCILORS

Mrs. William Hibbitts, Texarkana.
Mrs. Marcus T. Smith, Conway.
Mrs. J. T. McLain, Gurdon.
Mrs. C. W. Jones, Benton.
Mrs. J. B. Crawford, Little Rock.

COUNCILWOMAN TO THE WOMAN'S AUXILIARY TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs. W. Turner Wootton, Hot Springs National Park.

COMMITTEE CHAIRMEN

1939-1940

ORGANIZATION—Mrs. Loyce Hathcock, Fayetteville.
EDUCATION AND PUBLIC HEALTH—Mrs. Charles H. Lutterloh, Hot Springs National Park.
HYGEIA—Mrs. E. D. McKnight, Brinkley.
PUBLIC RELATIONS—Mrs. Calvin A. Churchill, Batesville.
LEGISLATION—Mrs. Warren S. Riley, El Dorado.
ILSE F. OATES STUDENT LOAN FUND—Mrs. C. E. Oates, Little Rock.
PHYSICAL HEALTH EXAMINATION—Mrs. J. B. Hesterly, Prescott.
MEMORIAL—Mrs. A. A. Blair, Fort Smith.
DOCTOR'S DAY OBSERVANCE—Mrs. H. T. Smith, McGehee.

ARCHIVES—Mrs. D. W. Goldstein, Fort Smith.
EXHIBITS—Mrs. T. G. Porter, Hazen.
JANE TODD CRAWFORD MEMORIAL—Mrs. Homer Dickens, DeWitt.
CANCER CONTROL—Mrs. S. J. Wolfermann, Fort Smith.
ESSAY CONTESTS—Mrs. O. J. T. Johnston, Batesville.
CONSTITUTION AND BY-LAWS—Mrs. W. R. Brooksher, Fort Smith.
FINANCE—Mrs. R. B. Robins, Camden.

DISTRICT COUNCIL WOMEN

FIRST—Mrs. T. S. Hare, Crawfordsville.
SECOND—Mrs. L. T. Evans, Batesville.
THIRD—Mrs. E. D. McKnight, Brinkley.
FOURTH—Mrs. C. W. Dixon, Gould.
FIFTH—Mrs. J. B. Jameson, Camden.
SIXTH—Mrs. N. B. Daniel, Texarkana.
SEVENTH—Mrs. M. G. Lawson, Benton.
EIGHTH—Mrs. B. A. Bennett, Little Rock.
NINTH—Mrs. J. L. Jackson, Harrison.
TENTH—Mrs. Fred R. Morrow, Fayetteville.

COUNTY PRESIDENTS—1939-1940

Arkansas—Mrs. S. A. Drennen, Stuttgart.
Clark-Nevada-Hempstead—Mrs. O. G. Hirst, Prescott.
Crittenden—Mrs. J. T. Irby, Earle.
Franklin—Mrs. A. S. J. Clarke, Ozark.
Garland—Mrs. Walter Klugh, Hot Springs National Park.
Independence—Mrs. J. J. Monfort, Batesville.
Jefferson—Mrs. Virgil L. Payne, Pine Bluff.
Johnson—Mrs. James Kolb, Clarksville.
Lonoke-Prairie—Mrs. T. E. Benton, Lonoke.
Miller—Mrs. Ralph Cross, Texarkana.
Madison, Mrs. N. J. Hill, Hindsville.
Monroe—Mrs. E. D. McKnight, Brinkley.
Saline—Mrs. M. G. Lawson, Benton.
Sebastian—Mrs. I. F. Jones, Fort Smith.
Ouachita—Mrs. B. V. Powell, Camden.
Pulaski—Mrs. L. F. Barrier, Little Rock.
Washington—Mrs. Fred R. Morrow, Fayetteville.
Sevier—Mrs. J. S. Hendricks, DeQueen.
Southeast Arkansas—Mrs. J. H. Burge, Lake Village.
Ninth Councilor District—Mrs. J. G. Gladden, Harrison.

HONOR GUEST

Mrs. Rollo K. Packard, Chicago, President, Woman's Auxiliary to the American Medical Association.

MONDAY, APRIL 15TH, 1940.

Parlor, Mezzanine Floor,
Goldman Hotel

9:00 A. M.—REGISTRATION.
11:00 A. M.—EXECUTIVE BOARD MEETING.
12:00 Noon—EXECUTIVE BOARD LUNCHEON.

GENERAL SESSION

2:00 P. M.—OPENING OF SESSION—Mrs. I. F. Jones, President, Woman's Auxiliary to the Sebastian County Medical Society.
INVOCATION—Rev. Carleton D. Lathrop, St. John's Episcopal Church.

ADDRESS OF WELCOME—Mrs. E. C. Moulton, Fort Smith.

INTRODUCTION OF STATE PRESIDENT—Mrs. C. E. Kitchens, DeQueen.

RESPONSE TO ADDRESS OF WELCOME—Mrs. A. S. Buchanan, Prescott.

REPORTS OF OFFICERS.

REPORTS OF STATE CHAIRMEN.

REPORT OF THE MEETING OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION—Mrs. Loyce Hathcock, Fayetteville.

REPORT OF THE MEETING OF THE WOMAN'S AUXILIARY TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs. W. Turner Wootton, Hot Springs National Park.

ANNOUNCEMENTS OF SPECIAL COMMITTEES.

REPORT OF REGISTRATION COMMITTEE.

REPORT OF THE ENTERTAINMENT COMMITTEE.

4:30 P. M.—TEA AT THE HOME OF MRS. D. W. GOLDSTEIN, 2723 Rogers Avenue.

PUBLIC MEETING

MONDAY, APRIL 15TH, 8:00 P. M.

Junior High School Auditorium
North 15th Street at Grand Avenue

CALLING THE MEETING TO ORDER—H. C. Dorsey, President, Sebastian County Medical Society.

INVOCATION—Rabbi Samuel Teitelbaum, United Hebrew Congregation.

INTRODUCTION of A. S. Buchanan, President, Arkansas Medical Society, Prescott.

ADDRESS—Mrs. Rollo K. Packard, President Woman's Auxiliary to the American Medical Association, Chicago.

ADDRESS—"The Priceless American Heritage of Health and Happiness," E. H. Skinner, Kansas City.

BENEDICTION—Rev. J. W. Hickman, First Presbyterian Church.

MEMORIAL SESSION

TUESDAY, APRIL 16TH, 8:00 A. M.

INVOCATION—Rev. L. L. Evans, First Methodist Church.

VOCAL SOLO—"My Friend" (Malott)

Mr. Charles McGill,

Mrs. Charles McGill, Accompanist.

READING OF NAMES OF DECEASED MEMBERS—E. E. Barlow, Dermott.

ADDRESS—L. T. Evans, Batesville, Chairman, Committee on Necrology.

VOCAL SOLO—"In My Father's House Are Many Mansions"

Mr. Charles McGill,

Mrs. Charles McGill, Accompanist.

BENEDICTION—Rev. Elbert Hefner, Central Presbyterian Church.

IN MEMORIAM

Mrs. J. C. Blackwood, Western Grove, September 25, 1939.

Mrs. H. G. Hummel, Little Rock, December 4, 1939.

Mrs. Dewell Gann, Sr., Benton, January 9, 1940.

Mrs. Edward Kultgen, Elaine, February 27, 1940.

GENERAL SESSION

TUESDAY, APRIL 16TH, 1940

Parlor, Mezzanine Floor, Goldman Hotel

9:30 A. M.—CALLING THE MEETING TO ORDER—Mrs. C. E. Kitchens, President.

INVOCATION—Rev. Victor Coffman, Immanuel Baptist Church.

READING OF THE MINUTES.

ADDRESS—Dr. A. S. Buchanan, Prescott, President, Arkansas Medical Society.

REPORTS OF COUNTY AUXILIARIES.

REPORT OF REGISTRATION AND CREDENTIALS COMMITTEE.

GREETINGS FROM THE WOMAN'S AUXILIARY TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs. Charles P. Corn, President, Greenville, South Carolina. (Read by Mrs. W. Turner Wootton, Hot Springs National Park).

ELECTION OF OFFICERS.

ANNOUNCEMENT OF THE ENTERTAINMENT COMMITTEE.

1:00 P. M.—LUNCHEON—Hardscrabble Country Club—One Dollar. (Transportation available at Goldman and Ward Hotels).

TOASTMISTRESS—Mrs. I. F. Jones, President, Woman's Auxiliary to the Sebastian County Medical Society.

INVOCATION—Mrs. S. P. McConnell, Booneville.

INTRODUCTION OF PAST-PRESIDENTS.

INTRODUCTION OF STATE OFFICERS.

INTRODUCTION OF WIVES OF OFFICERS OF THE ARKANSAS MEDICAL SOCIETY.

PRESIDENT'S REPORT—

Mrs. C. E. Kitchens.

ADDRESS—"Functions of the Auxiliary," Mrs. Rollo K. Packard, Chicago, President, Woman's Auxiliary to the American Medical Association.

UNFINISHED BUSINESS.

REPORT OF COMMITTEE ON COURTESY RESOLUTIONS.

INSTALLATION OF OFFICERS—

Mrs. Rollo K. Packard.

PRESENTATION OF GAVEL—Mrs. C. E. Kitchens.

ADDRESS OF INCOMING PRESIDENT—Mrs. Alfred Hatchcock, Fayetteville.

4:00 P. M.—POST-CONVENTION BOARD MEETING—Mrs. Alfred Hathcock, Presiding.

TUESDAY, APRIL 16TH, 1940.

Goldman Hotel

7:00 P. M.

BUFFET SUPPER, FOLLOWED BY DANCING.

WEDNESDAY, APRIL 17TH

GOLF.

SCENIC DRIVES.

MOTION PICTURES.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

TO OUR DOCTORS

Usherer in of life and slave to all of us,
Man with kindly eyes and sympathy not feigned,
Forgive us if we call you cold, unfeeling, heartless,
For flinching not at sight of mortal pain.
With eager, skillful hands for any mission,
And ready will to serve your fellow-man,
You've caught the spirit of the Great Physician—
To go about and do what good you can:
Still serving when our world is deep in slumber
To ease the pain-racked bodies every one,
And giving strength and courage to the number
Whose eyes implore for hope when there is none.
"Self last and always others first in thought"—
This message all will read in what you've wrought.

Hetty Dan Bourne, DeWitt.

Whereas, We the members of the Woman's Auxiliary to the Arkansas Medical Society, having lost an esteemed and beloved member who was the first President-elect of this organization, and who gave so much of her time, and efforts to promote the aims of this Auxiliary, Therefore, be it resolved that we express our sincere regrets at her passing to her beloved family and that a copy of these resolutions be given her family, a copy spread upon our minutes, and a copy be printed in the Arkansas State Medical Journal.

Mrs. Chas. E. Oates,
Mrs. C. W. Garrison,
Mrs. J. B. Crawford.

Mrs. C. E. Kitchens, of DeQueen, President of the Auxiliary to the Arkansas Medical Society came to Fort Smith February 25th to meet a committee from the Auxiliary to the Sebastian County Medical Society and to arrange details for the coming state meeting in Fort Smith, April 15-17th, 1940.

Mrs. W. R. Brooksher, Jr., is chairman of the local auxiliary. A meeting was held at the home of Mrs. Brooksher, 3809 Free Ferry Road, and the convention program completed. Afterwards Mrs. Kitchens was a guest of honor at a luncheon of the committee at the Goldman Hotel. In the party were Mrs. Kitchens, Mrs. Brooksher, Mrs. W. F. Rose, Mrs. Everett Foster, Mrs. I. F. Jones, Mrs. H. H. Smith, Mrs. D. W. Goldstein, Mrs. B. W. Freer, Mrs. Ralph Weddington, Mrs. J. S. Southard, Mrs. J. E. Stevenson, Mrs. Walter Eberle, Mrs. S. J. Wolfermann and Mrs. T. P. Foltz.

The Woman's Auxiliary to the Sebastian County Medical Society held a joint meeting with the Junior High School Parent-Teacher's Association March 7th at the school. The program was presented under the direction of the Public Relations Committee, Mrs. W. G. Eberle, Chairman. Dr. T. P. Foltz was the speaker, taking as his subject: "Should Medicine Be Socialized on a National Scale?" The speaker was introduced by Mrs. I. F. Jones, Auxiliary president. This meeting took the place of the March luncheon meeting.

Mrs. W. F. Rose, Publicity Chairman.

Dear Auxiliary Members:

Successful conventions do not "just happen." It is necessary that plans be made long in advance of the annual meeting, and this is being done, both by our hostess Auxiliary in Sebastian County and by officers and chairman throughout the state.

When this message reaches you, I trust all dues for 1940-41 will be in the hands of the state treasurer, and that all state officers, chairman and county presidents will already have sent two copies of their annual report to the state secretary.

I have been unable to meet many of you during the year; may I have the happy privilege in Fort Smith, April 15th, 16th and 17th?

This year our national president, Mrs. Rollo K. Packard, Chicago, will attend our convention and will install the new officers on Tuesday, April 16th. Everyone will have an opportunity to meet her at a tea, Monday, April 15th.

Mrs. C. E. (Bess) Kitchens, President.

Plans for their part in the entertainment program for a state meeting of the Arkansas Medical Society, were discussed by members of the auxiliary of the Sebastian County Medical Society at a luncheon meeting at the home of Mrs. Ruth Moss Carroll, 400 North Greenwood avenue. The auxiliary president, Mrs. I. Fulton Jones, presided.

Mrs. W. R. Brooksher, Jr., and Mrs. Charles T. Chamberlain were hostesses. The state meeting in this city will be April 15, 16 and 17. Mrs. Brooksher was named general chairman for the auxiliary's activities in entertainment of convention visitors. Mrs. W. F. Rose, chairman of publicity for the convention.

Fifteen guests for the luncheon and meeting were: Mrs. I. Fulton Jones, Mrs. Walter G. Eberle, Mrs. S. P. Stubbs, Mrs. Eugene Stevenson, Mrs. Hardy H. Smith, Mrs. J. S. Southard, Mrs. Fred Krock, Mrs. B. W. Freer, Mrs. Everett Moulton, Mrs. D. W. Goldstein, Mrs. A. A. Blair, Mrs. M. E. Foster, Mrs. W. F. Rose and the hostesses, Mrs. Brooksher and Mrs. Chamberlain.

Mrs. W. F. Rose

Publicity Chairman for the Auxiliary of the
Sebastian County Medical Society.

The 18th Annual Convention of the Woman's Auxiliary to the American Medical Association will be held in New York City, June 10-14, 1940, with headquarters in the Hotel Pennsylvania. In view of the fact that the second edition of the World's Fair will accelerate advance hotel reservations, it is urged that reservations be made immediately through the housing bureau which has been set up by the American Medical Association, Dr. Peter Irving, Room 1036, 233 Broadway, New York City, N. Y.

The Woman's Auxiliary to the Pulaski County Medical Society held an open meeting, February 21st, at the

University of Arkansas Medical School. Mrs. W. A. Lamb, of the Public Relations Committee, introduced Dean Stuart P. Cromer, who in turn introduced Dr. A. S. Buchanan, of Prescott, president of the Arkansas Medical Society, who spoke on "Socialized Medicine." Mrs. C. E. Kitchens, of DeQueen, president of the Arkansas Medical Auxiliary, told the story of Jane Todd Crawford. Tea was served by a committee composed of Mrs. E. H. White, Mrs. G. W. Reagan, Mrs. B. L. Robinson, Mrs. L. F. Barrier, Mrs. W. N. Freemyer and Mrs. Harvey Shipp.

In observance of Doctor's Day, Thursday, February 22nd, the Bowie-Miller Counties Medical Auxiliary, Mrs. Ralph Cross, president, held an open meeting at the Congregational Church. Doctor's day, a day set aside each year to bring before the laity the romance surrounding doctors' lives and their work for humanity was originated by Mrs. Bonar White of Atlanta in 1934 when president of the Southern Medical Auxiliary. The observance is confined to the southern states. Mrs. John T. Porter presented a book review of Sholem Asch's "The Nazarene." Mrs. Cozia Henson Case and Mrs. William Hibbitts furnished musical numbers during the afternoon. The meeting was open to the public and special invitations were extended to the presidents of all organizations. The auditorium was decorated with American flags. Visitors were present from Mt. Pleasant, Atlanta, Ashdown, Lewisville, DeQueen and other nearby towns. The program was in charge of the public relations committee, Mrs. Harry E. Murry, chairman. A

committee visited all cemeteries of Texarkana placing flags on graves of all doctors of whom they had a record.

Mrs. Ralph Weddington and Mrs. Raymond Smith were hostesses for a luncheon and business meeting of the auxiliary of the Sebastian County Medical Society at the home of Mrs. Ruth Moss Carroll, 400 North Greenwood avenue. Valentine suggestions were used in table appointments. Mrs. I. Fulton Jones, president, presided at a short business session. No program was arranged since the auxiliary members had expected to have as their honor guest Mrs. C. E. Kitchens, state president of the auxiliary, who was to come from her home in DeQueen for an official visit to the auxiliary. Illness prevented her keeping the engagement at the luncheon where she was to have been a guest speaker.

Mrs. W. R. Brooksher, Jr., who is to be a general chairman for the State Medical Convention, which is to be held in Fort Smith April 15, 16 and 17, led a discussion of the auxiliary plans for the convention.

Luncheon guests were Mrs. I. F. Jones, the hostesses, Mrs. Smith and Mrs. Weddington, Mrs. Hardy H. Smith, Mrs. D. W. Goldstein, Mrs. J. S. Southard, Mrs. W. R. Brooksher, Jr., Mrs. Walter G. Eberle, Mrs. Everett Moulton, Mrs. S. J. Wolfermann, Mrs. W. F. Rose, Mrs. C. W. Hall, Greenwood, Mrs. B. L. Ware, Greenwood.

Mrs. W. F. Rose,

Publicity Chairman for the Auxiliary of the Sebastian County Medical Society.

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HEADQUARTERS

65th ANNUAL SESSION

ARKANSAS MEDICAL SOCIETY

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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BOOK REVIEWS

The Newer Nutrition in Pediatric Practice: By I. Newton Kugelmass, B. S., M. A., M. D., Ph. D., Sc. D., Attending Pediatrician, Broad Street Hospital and Heckscher Institute, New York; Consulting Pediatrician, Lynn Memorial Hospital, Monmouth Memorial Hospital and Muhlenberg Hospital, New Jersey. J. B. Lippincott Company, Philadelphia, Montreal and London, Publishers. Price \$10.00.

This book brings forth a new idea in the science of nutrition, especially as it relates to pediatrics. The author has certainly delved deep into the science of nutrition and nutritional research to bring forward the many ideas that are given in this text. The book is divided into three main divisions. The first on Nutritional Physiology; Second, Nutrition in Health, and, Third, Nutrition in Disease. Anyone interested in the research of nutrition or nutrition as it applies to pediatric practice, will be well repaid for his study of this text. It is entirely too elaborate, too deep and too far reaching for the average practitioner, as he would not have the time to give to the study that this book requires. The newer knowledge of nutrition is clarified, and our conception of child health is one of well being more than freedom from disease.

The Management of Obstetric Difficulties: By Paul Titus, M. D., Obstetrician and Gynecologist to The St. Margaret Memorial Hospital, Pittsburgh; Consulting Obstetrician and Gynecologist to the Pittsburgh City Homes and Hospital, Mayview, and to The Homestead Hospital, Homestead, Pa.; Secretary of The American Board of Obstetrics and Gynecology. 368 illustrations and 5 color plates. Second Edition. C. V. Mosby Company, 1940, St. Louis, Publishers. Price \$10.00.

This excellent treatise is divided into sections, the main ones being: Complications of Pregnancy, Complications of Labor, and Complications of the Puerperium. Several chapters are devoted to sterility and obstetrical operations. The author has developed throughout the text many practical aids to physicians for the different obstetrical emergencies. He states that obstetrical work is peculiar in two respects, namely: Its difficulties are largely preventable, but its emergencies must be promptly met, and with this as a text he has provided much available information to aid the obstetrician's judgment respecting the proper management of said emergencies. The technique of X-ray Pelvimetry, The Management of the Different Toxemias, as well as the Anemias of Pregnancy are included, as are the newer ideas of Obstetrical Analgesia and the use of Sulfanilimide in Puerperal Sepsis.

It certainly fills a long felt need in bringing to the front the many different and difficult obstetrical complications and their handling. The ordinary textbook of obstetrics only devotes a few paragraphs to these different emergencies, whereas the author has taken up each individually and given it its proper place.

Handbook of Orthopaedic Surgery. By Albert Rives Shands, Jr., A. B., M. D., Medical Director of the Nemours Foundation, Wilmington, Delaware; Associate Professor of Surgery in Charge of Orthopaedic Surgery, Duke University School of Medicine, Durham, North Carolina (on leave of absence); in collaboration with

Richard Beverly Raney, A. B., M. D., Associate Orthopaedic Surgery, Duke University School of Medicine. Pp. 567. Illustrated. Price \$4.25. St. Louis: C. V. Mosby Company, 1940.

The essentials of orthopaedics for use of the general practitioner and general surgeon have been made available in this small volume in a remarkable manner. Only the needed procedures and examinations are covered and much detail has here been omitted.

Cancer Handbook of the Tumor Clinic, Stanford University School of Medicine: Edited by Eric Liljencrantz, M. D., Chief of Tumor Clinic, Stanford University School of Medicine; Consultant in Neoplastic Disease, United States Naval Hospital, Mare Island, California, and United States Marine Hospital, San Francisco, California. Price \$3.00. Stanford University, California: Stanford University Press, 1939.

This handbook, based upon the material assembled for postgraduate instruction, briefly presents all essential data for the clinical management of patients with cancer. The cancer problem and factors involved are discussed. Biopsy is emphasized. Irradiation therapy is summarized in adequate form. It is felt that undue emphasis, however, is placed upon preoperative roentgen therapy in breast carcinoma. The book is worthy of inclusion in the libraries of all who have contact with the cancer patient.

The Essentials of Applied Medical Laboratory Technic. By J. M. Feder, M. D., Director of Laboratories and of the Allergy Clinic, Anderson County Hospital, Anderson, South Carolina. Illustrated. 2 color plates. Price \$5.00. Charlotte, North Carolina: Charlotte Medical Press, 1940.

Dr. Feder bridges the gap between expensive and elaborately equipped laboratories and the smaller office or hospital which provides the essential services at a minimum cost. With this book the office nurse or technician is guided by simplified presentations for satisfactory routine work. All essential features of laboratory technic are given in plain terms and without sacrifice of any needed detail. Fundamentals only are considered, avoiding unrelated data. Only time-proven methods are presented and efficiently, simplicity and lack of necessity for extensive equipment govern the selection. Valuable suggestions are made for adequate laboratory equipment where cost and space are deciding factors. The care and handling of equipment is given special attention. The book is a "real contribution to the useful knowledge of the subject and a great help in the performance of their everyday tasks."

Diseases of the Gallbladder and Bile Ducts: By Waltman Walters, B. S., M. D., M. S. in Surgery, Sc. D., F. A. C. S., Head of Section in Division of Surgery, The Mayo Clinic; Professor of Surgery, The Mayo Foundation (University of Minnesota); and Albert M. Snell, B. S., M. D., M. S. in Medicine, F. A. C. P., Head of Section in Division of Medicine, The Mayo Clinic; Professor of Medicine, the Mayo Foundation (University of Minnesota). 645 pages with 342 illustrations on 195 figures. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$10.00.

This is a most comprehensive and adequately detailed work on the subject. In addition to a thorough presentation of the anatomical, physiological and pathological background, medical and surgical treatment receive exhaustive, yet most readable, attention.

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No. 12

THE GANN RESUSCITATOR

A Preliminary Report

DEWELL GANN, JR., M. D.

Little Rock

To revive the suffocated has long been the object of man. One has only to leaf through the Index Medicus for most any year to learn volumes have been written on the subject and many methods devised for the purpose. Some of the methods have been good, some bad. In fact, some did so much more harm than good that a commission was organized many years ago to investigate them. Among other things, the commission recommended that "the use of the prone pressure method of artificial respiration be broadened and encouraged in every way possible." I joined in the movement whole-heartedly and of recent years have given much thought to the problem. Whether my contribution will be worthwhile is for you to decide. At this time it is simply my desire to present facts pertinent to the subject—facts with which all should be familiar if on occasion they expect to resort to the saving of a life by means of artificial respiration.

Respiration

Respiration has been defined as an act whereby the carbon dioxide in the blood is exchanged for the oxygen in the air as the blood courses through the lungs. The act is divided into inspiration and expiration and may be either thoracic or abdominal in type. Regardless of the type of breather one may be, only one-sixth of the total air is involved in one complete respiratory cycle. This fact must be more firmly impressed upon operators. The chief organs involved during a respiratory movement are the heart, blood vessels and lungs.

Diaphragm

The structure chiefly responsible for a respiratory cycle is the diaphragm. It is a circular muscular structure attached to the ensiform cartilage

in front, the ribs laterally and the lumbar vertebrae behind. The movable portion, the central tendon, is attached to the pericardium. Assisting the diaphragm in inspiration are the external intercostals, levatores costarum, all muscles attached to the thorax and all muscles contracting simultaneously with it. Muscles not contracting simultaneously with the diaphragm are muscles of expiration, viz., the internal intercostals, the transversus thoracis, the ileo-costalis lumborum, the serratus posticus and the quadratus lumborum. The two latter fixate the ribs and prevent too much inward pull in order not to antagonize inspiration.

Inspiration

When the diaphragm contracts the lungs follow it in its downward descent. Because of the attachment of the central tendon to the pericardium the heart also descends. As the lungs descend they fill with air which is forced in by atmospheric pressure. This is due to the negativity of the intrathoracic pressure, this pressure being constantly less than one atmosphere. The intrathoracic pressure is less than the intrapulmonic pressure because of the elastic pull of the lungs. Normally it is 4.5 mms. Hg. at the end of expiration and 7.5 mms. at the end of inspiration. It can be lowered, of course, by forcible inspirations.

Descent of the diaphragm also raises the intra-abdominal pressure. As a result the abdominal walls protrude, so-called diaphragmatic, or abdominal respiration. As a result of the increase in the intrathoracic and intra-abdominal pressures the blood vessels are compressed thereby promoting the course of blood through the lungs with a resulting increase in gaseous interchange.

Expiration

At the end of inspiration the ribs and diaphragm are brought back to the normal position by purely physical forces, such as elasticity of the abdominal walls, elasticity of the lungs and the weight and torsion of the ribs.

Resuscitation

To be effective measures of resuscitation must be instituted at once. Time is one of the most essential factors in resuscitation. Every moment is golden. Sometimes within five minutes the last chance is lost and the heart usually stops in from six to ten minutes after cessation of respiration. It is largely for this reason the Shafer method has become so popular and is so widely taught first aid crews. Because of these facts and the fact that manual methods can be started in a few seconds by the first person arriving at the scene of action, we have in manual methods an effective means of resuscitation; however many people have little or no knowledge of matters pertaining to resuscitation and there are some things the hands cannot do. Suffice it to say: To save one's life from suffocation application of the measure must be made at once. If respiration is suspended for any great length of time nothing will bring the individual back to life.

Artificial Respiration

Since artificial respiration is defined as the maintenance of respiratory movements by artificial means in cases of suspended animation; any means of promoting or aiding the structures involved in a respiratory cycle might be classed as a resuscitator or a method of resuscitation.

Resuscitators

Broadly speaking methods of maintaining respiration may be divided into two groups: Mechanical and Manual.

Mechanical Devices; lung motors and pulmotors are generally conceded to be inferior to manual methods because of their inaccessibility, complexity, etc.

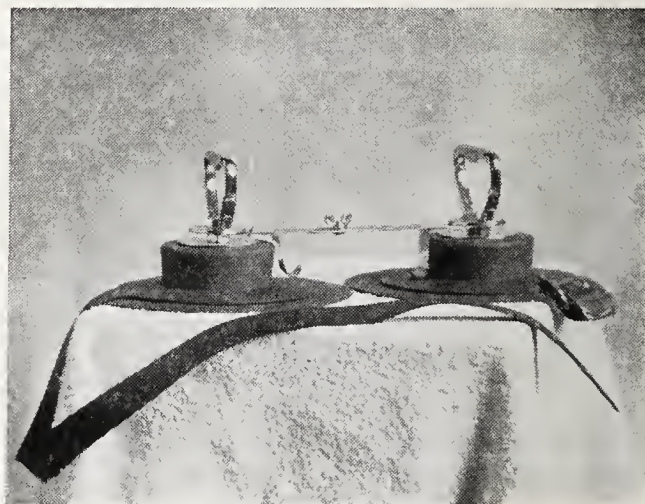
Manual Methods: Hart E. Fisher, one of Chicago's leading industrial surgeons, and a man who is giving a great deal of thought to resuscitation has said: "One of our greatest needs today is a method whereby we can apply uniform pressure over the abdomen and a means of manipulating the abdominal walls in such a manner as to activate the diaphragm." This can be done by what I have chosen to call the CUP METHOD, and I believe my experiments will bear me out when I say the cups will meet these requirements. If this is true we have added a value to the methods described by Shafer and Sylvester. Certainly the mechanical devices developed with a view of bringing about an interchange of gases in the lungs with little or no regard for the circulation have fallen short of the objective. The blood

pools in the splanchnic area in cases of suffocation just as it does in shock, and it is just as important to get this blood into the right auricle of the heart as it is to bring about an interchange of air in the lungs. Once we succeed in getting this blood into the auricle the heart will go through a complete heart cycle thus forcing the blood through the pulmonary circulation. The blood gives up carbon dioxide, takes up oxygen, and distributes it to the tissues thus meeting the requirements for sustaining life. Any device short of these requirements in operation is not a resuscitator and will not resuscitate.

There probably is no greater need today than a resuscitator that will resuscitate; a resuscitator of such construction that it will not get out of order when not in use; a resuscitator of such proportions that it will not require a special room for safe-keeping; one economical in cost and operation; one that will not require technical knowledge for proper use, one that can be operated by an individual not trained in matters pertaining to resuscitation and a resuscitator that will do no harm.

Gann Resuscitator

The model consists of two rubber cups three inches in diameter. Each has a handle in the head of which is a ball valve. The cups are held apart by a flat piece of monel metal with metal washers at each end. The metal bars are adjustable through fenestration and a winged nut. At the base of each cup is an apron of flat rubber two inches in width. This is covered by a ring of flat rubber of approximately the same width to which is moulded a rubber band one and one-half inches wide to be used as a body strap. This is probably unnecessary in most cases but is used as a precaution against those who get



THE GANN RESUSCITATOR

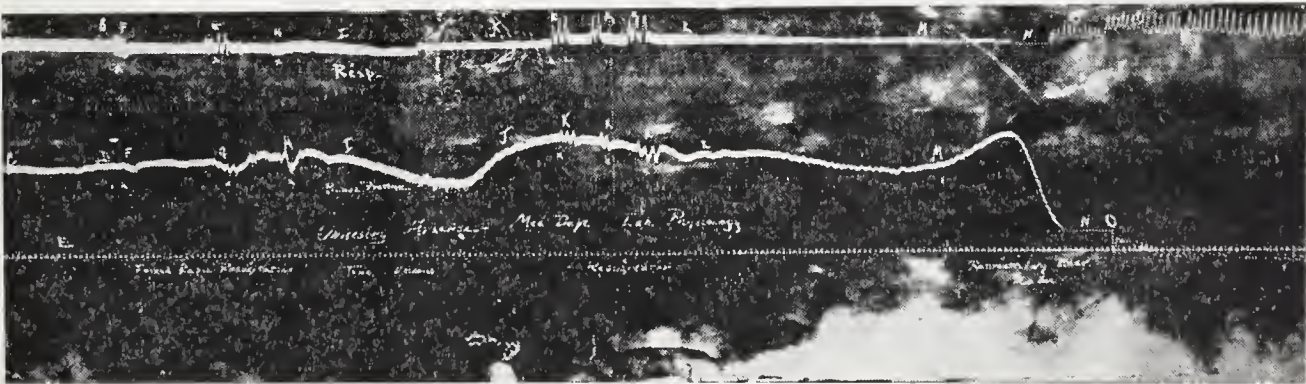
excited, pulling the cup off the skin before it has time to establish a vacuum.

Application of Cups

Our experiments have shown this method to be effective whether the cups be applied to the front or back of the chest, the abdomen, or one cup on the chest and the other on the abdomen, but until one has had the opportunity of applying the cups in the various positions I believe the best position for the cups is beneath the points of the shoulder blades. In our early experiments on the dog we learned that it was necessary to fixate the abdominal walls in order to get the maximum effect on the circulation when the application of the cups was made on the front of the chest and the chest walls compressed. In fact, the circulatory effect was almost doubled after the abdomen had been bandaged in such a manner as to prevent pooling of the blood in the splanchnic area. The bandaging effect in the human is obtained somewhat by turning the victim on the abdomen. When downward pressure is made on the cups the floor acts as a resistance point to the muscles of the abdomen. This application would especially apply in cases of drowning. On the contrary, in cases of suffocation from gas or smoke, the front application might well be the application of choice. In these cases, as above noted, the ap-



plication would be made on the front of the body in one or the other locations. Here the location of choice would depend somewhat upon the condition of the patient and his bodily state. In cases in the early stages of suffocation or first degree of asphyxia, while muscle resiliency is firm and tissue elasticity responsive, little respiratory aid is required to establish the normal, but in states of extremis with muscle tone largely absent and tissue elasticity nil, manipulation of the abdominal wall is very helpful to recovery. In this way and this way alone, can we get the maximum benefit from the application, in that we activate the diaphragm and force the pooled blood from the splanchnic area into the general circulation.

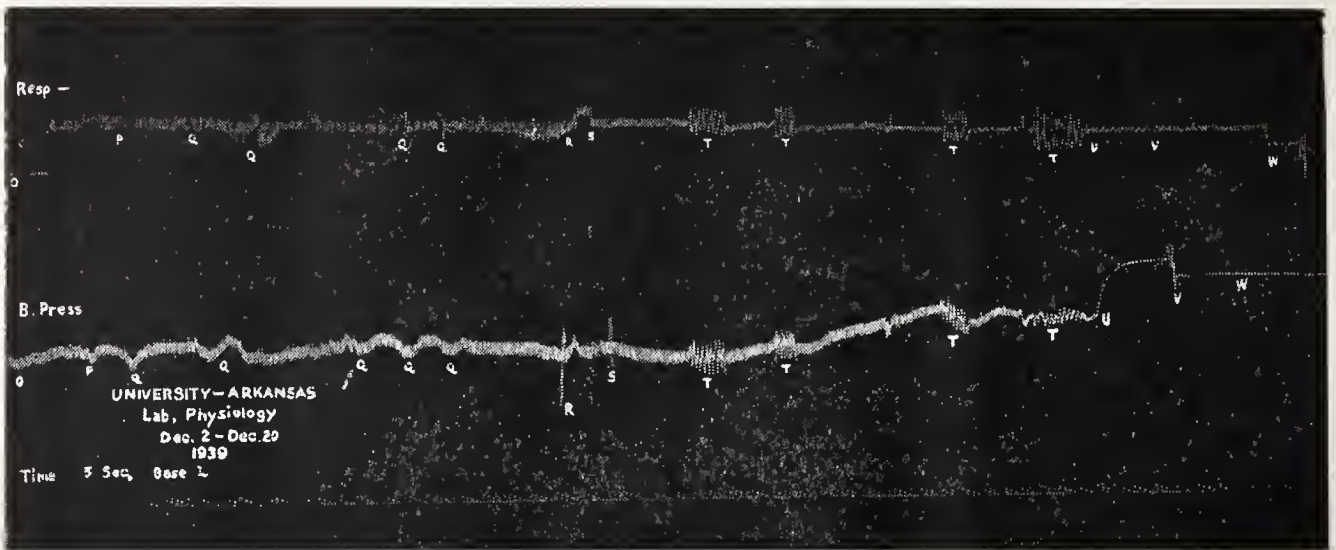


The above is a photographic copy of a kymographic record of the blood pressure and respiration made in the laboratory of the University of Arkansas, Medical Department. The time interval is five seconds. It shows the effect of the application of the Gann Resuscitator on the dog in surgical anesthesia.

LEGEND

- A-B. Normal respiration. Surgical Anesthesia.
- C-D. Normal blood pressure. Surgical Anesthesia.
- E. Time 5 second intervals.
- F. Resuscitator. Forced rapid movements. Surgical Anesthesia.
- G. Resuscitator. Forced rapid movements. Count 2. Count 4.

- Note increase in amplitude respiratory movements (Doubled).
- H. Resuscitator. Forced rapid movements. Note rise in blood pressure.
- I. Anesthesia. Stage 4.
- J. Recovery.
- K. Resuscitator applied to count of 4. Note further increase in amplitude when tissues are more resilient than when in surgical anesthesia.
- L. Full ether.
- M. Rebreathing full ether. Air completely shut off.
- N. Death.
- O. Resuscitator applied to count of 4.



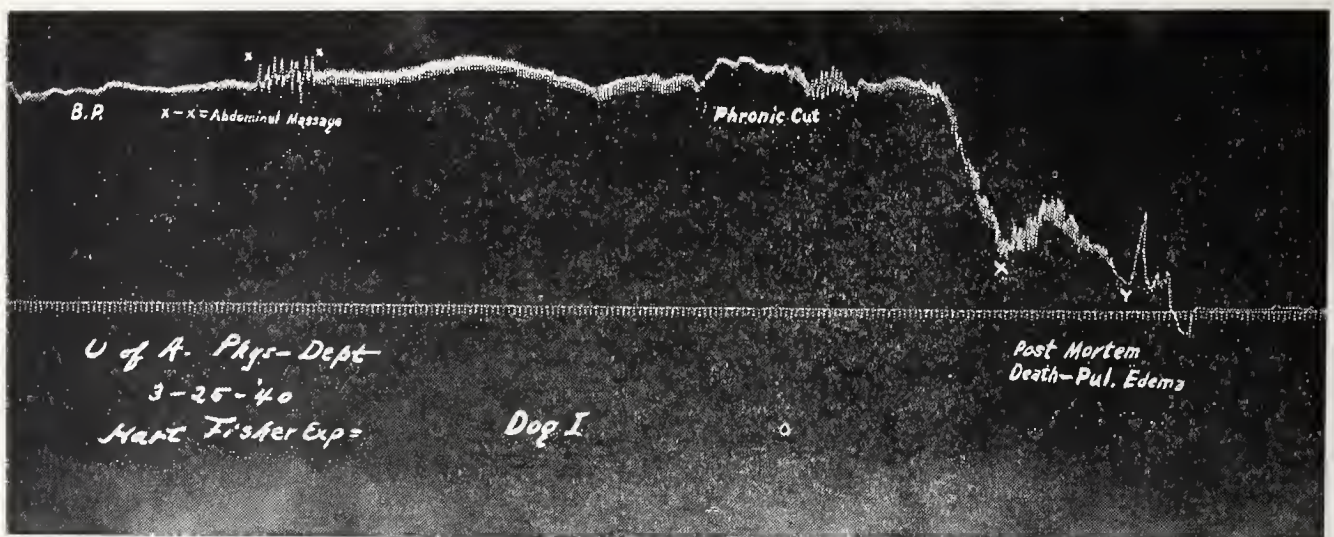
DOG. Mongrel. Weight 15.5 kgms.

Object: Phrenic nerve experiment. To study effect of resuscitator movements on respiration and blood pressure after severance of phrenic nerves under surgical anesthesia.

LEGEND

- A-B. Normal respiration—Surgical anesthesia corneal reflex absent.
- C-D. Normal respiration.
- E. Time—5 second intervals.
- F. Rapid movements.
- G. Movements to count 3.
- H. Movements to count of 4.
- I. Ether rise—recovering—air vent closed.
- J. Resuscitation count 4—air vent half open.
- K. Kymograph stopped during exposure of phrenic nerves. Exposed at 5:10 p. m.
- L. Kymograph stopped to repair time.
- M. Blood clotting in canula—resuscitator manipulated in effort to dislodge clot.

- N. Clot complete.
- O. Canula removed from femoral—cleaned.
- P. At 5:15 rubber tubing removed from tracheal canula and air from lungs was directed into Sanborn Metabolism Machine. The tracing produced is on another record. Air intake increased $1\frac{1}{3}$ times.
- Q. Phrenic nerve stimulations with electric needle.
- R. At 5:35 cut left Phrenic.
- S. Cut right Phrenic.
- T. Resuscitation count 4. Count 2—alternate.
- U. Clot in femoral.
- V. Resuscitator removed. Note: After resuscitator was removed autopsy was performed by Dr. Siler. Inspection showed no movement of the diaphragm. Lungs were inflated by artificial insufflation. Phrenic nerves were traced upward from diaphragm. The right phrenic had been completely severed. The left phrenic had been severed above a filament coming off below point of severance—from the level of the 5th or 6th cervical. The main trunk comprising $\frac{5}{6}$ th of the nerve had been cut.



Subject: Mongrel Dog. Weight 48 pounds.

Object: To demonstrate effectiveness of manipulation of abdominal walls on circulation (abdominal massage).

Dog anesthetized with ether, closed cup, at 2:20 p. m. Trachea exposed, canula inserted and connected to quart bottle containing approximately twenty-four ounces of ether.

Phrenic nerves exposed and identified by Student Daley at 3:25 p. m.

Canula placed in right carotid artery for blood pressure record 3:30.

At 3:35 accidental discharge of large quantity of ether into lungs through rubber hose connection to ether bottle while attempting to change hose from ether bottle to Sanborn Metabolism Machine for respiratory tracing. Signs of pulmonary edema developed shortly. Hose disconnected from tracheal canula and large quantity of bloody fluid drained from trachea by lowering head of dog.

At 3:45 apparatus reset. At 3:50 phrenics were cut.

At 4:00 the dog died rather suddenly. Cause: pulmonary edema. Note: The rubber tubing connecting the ether bottle to the trachea was much smaller than the metal connection to the

Sanborn. No small amount of difficulty was experienced in making the connection. For this reason our respiratory tracings in this experiment are not continuous, but instead are made at intervals.

- A. Variations in blood pressure from application Gann Resuscitator to front of chest.
- B-P. Variations effected by abdominal massage to count of five.
- C. Pressure was being exerted on the abdominal wall with the hand when the blood pressure began to fall. This was for the purpose of comparing the hand effect with the machine effect. After the pressure had fallen to —X— the cup was applied and the abdominal wall manipulated. Note the effect on the emptying and filling of the heart.
- Y. At Y the chest was opened through the diaphragm and the heart squeezed with the hand. Note the marked first effect, followed by lesser effects from squeezing the heart with the hands.

Post Mortem: There was no evidence of injury to the heart or abdominal viscera from the cup manipulations although the movements were rather violent at the last. The lungs: Findings typical of pulmonary edema.

Generally speaking, therefore we may apply the following:

General Rules

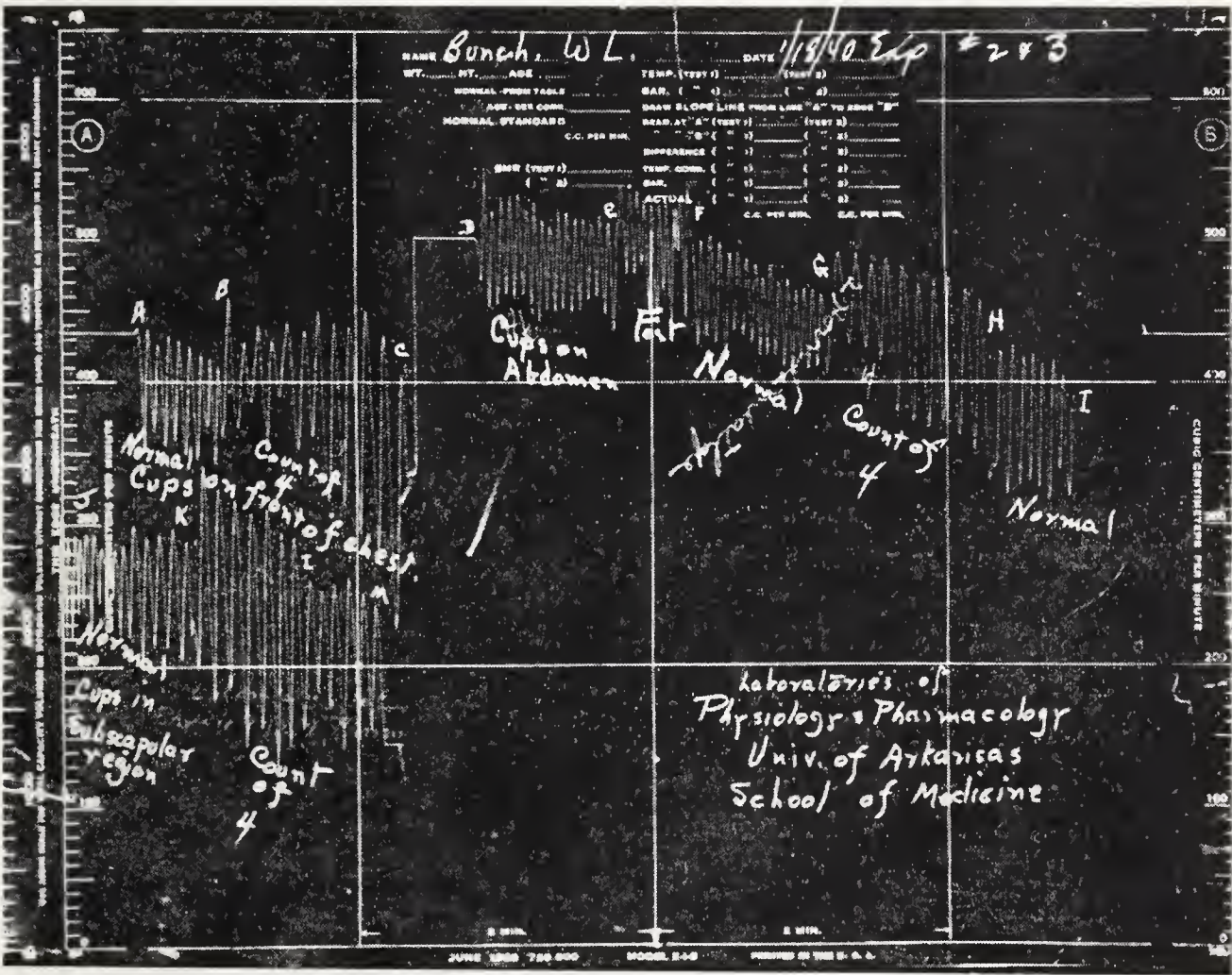
Suffocation may occur the result of a number of causes, e.g., from the inhalation of smoke or gases; electric shocks; trauma; poisoning, disease and drowning. Regardless of the cause of suffocation it is always well to inspect the mouth and remove, if present, any foreign matter, plates, etc. On occasions the tongue may become troublesome. In fact, in cases of extremis the tongue may be swallowed. See that it is

pulled forward. Rhythmic traction on the tongue has been advanced as a method of artificial respiration and when help is available it is not a bad idea to have someone pull the tongue forward, with expiration. We frequently resort to this in the dog.

In all cases in which the cups are to be used the skin must be bared; at the same time the body must be kept warm.

Application

- 1. Lay victim on belly, face resting on forearm, other arm extended.



The above is a photograph of a tracing made with the Gann resuscitator. A Sanborn metabolism machine, model IES was used. The experiment was conducted by Dr. K. A. Siler, Associate Professor of Physiology, University of Arkansas School of Medicine.

Object: To compare the effect of the resuscitator on breathing when applied over the lower ribs on the front of the chest, beneath point of shoulder blade on back and on the abdomen, a cup being placed on each side of navel.

Subject: Same as used in experiment No. 1.

Present: Dr. Siler, Conductor and others.

EXPERIMENTS No. 2 and 3.
January 18, 1940.

Subject in same position and Sanborn with same attachments as used in experiment No. 1. The resuscitator was applied over the lower ribs on the front of the chest from A to C, over the abdomen from D to I and over the lower ribs on the back from K to M.

LEGEND
Upper Tracing A to I.
Resuscitator applied to front of chest.
A-B. Normal breathing of oxygen from metabolimeter tank.
B-C. Resuscitator manipulated to count of four, four down, four

up. Subject just now non-resisting, completely cooperative and understanding. It is now possible to do practically all breathing for patient and operator starts manipulation of resuscitator downstroke on expiration.

C-D. Resuscitator moved from chest to abdomen. No change in metabolimeter hook up.

D-E. Normal abdominal breathing.

E-F. Resuscitator applied in rapid movement.

F-G. Normal abdominal breathing.

G-H. Resuscitator manipulated to count of four, four down, four up.

H-I. Normal abdominal breathing.

Lower Tracing J to M.
Resuscitator applied to back, just beneath point of shoulder blade, (Subscapular region). Subject lying on belly, face resting on right forearm, left arm extended. This has proven to be the best position for patient and resuscitator.

J-K. Normal breathing, patient on belly, face down.

K-L. Resuscitator applied to count of four. Four down, four up.

L-M. Normal breathing.

Note: Carter acted as operator during both these experiments. Note reproduction of normal respiration with increased amplitude and effect of massage of heart on blood pressure.

2. Straddle body at mid-section.
3. Place cups beneath the point of the shoulder blade on each side.
4. Secure strap around body. Fasten buckle.
5. Force air out of cups by downward pressure on both handles.
6. When vacuum is obtained in cups hold arms in comfortable position, push downward while expiring. Pull upward while inspiring. Time movements with own breathing or to count of 6.
7. Push down while counting 1, 2 and 3. Pull up while counting 4, 5 and 6.

Drowning

Do not try to expel water from lungs by usual methods.

Apply cups just beneath the point of the shoulder blade on each side.

Hold arms straight. Exert pressure on handles of cups, as follows Push down while expiring. Pull up while inspiring. Time with own breathing. Repeat, twelve to fifteen times per minute, swinging body backward and forward, or use count of six.

Broken Ribs

In crushing injuries of chest place a cup on each side of the navel. Manipulate the abdominal walls in the same manner as in chest application, that is time manipulations to own breathing or to count of six. Movements should be slow and not too forceful, only one-sixth of the air in the body is exchanged in one breath.

Details of experiments will be published at an early date.

A SIMPLE OFFICE OR BED-SIDE TEST TO DETERMINE THE HYDROGEN-ION, pH, OR DEGREE OF ACIDITY OR ALKALINITY

J. H. McCURRY, M. D., CASH

I regret to say that patients do not come to us labeled with the ailment from which they are suffering. To succeed in arriving at a correct diagnosis we must rely on data obtained by history, observation, physical, chemical, biological, microscopical and other methods of precision.

The urine is a good index, or criterion to the condition of the other body fluids. Any disease, medication, or food which changes the urine will likewise change the blood. To place litmus in urine and feel satisfied when it is acid without knowing the degree of acidity is exactly like using a fever thermometer uncharted, or taking the blood pressure with an instrument without a dial, says one advocate of this test.

The use of bio-chemistry by doctors to determine the chemical balance or unbalance of the body secretions or excretions in disease is the backward child of diagnosis, suffering a pathetic case of arrested development. No doubt this non-development has been due to the complication of methods used which have kept the pH field in the background for only in the last few years has the colorimetric method been devised. The chemical balance that determines health or disease is a decidedly delicate one, and a normal pH is often the deciding factor between life and death. By pH is meant degrees of acidity or alkalinity, the hydrogen-ion concentration. It is now known that every tissue cell functions best in a fluid of particular ionic concentration, known

as the optimum, best or normal pH. In the case of the blood, this hydrogen-ion concentration or pH value is expressed by Bio-Chemist as 7.4, slightly alkaline, which is normal for this fluid. The urine's normal reaction is pH 6.0, slightly acid.

Physiologists tell us the unit of structure of life is the cell and since the cells make up tissues and tissues make up organs which, in turn, form a system that specializes to form a definite function necessary to life, it is easy to see that there is symbolic relationship between systems, organs, tissues and cells. And since the hydrogen-ion concentration is lowered or raised in most all cases of organic disturbances, by acid and toxemic-producing bacteria and various other causes, body chemistry undergoes a radical change. There is developed either an acidity, alkalinity or a neutral state, shifting the normal pH's to the abnormal, thereby causing disease or favoring the diseased process when present. If we can determine which of these are present we will arrive at a very necessary measure to aid in a more intelligent, scientific and successful management of any given case.

In 1927 in a paper read before the Society and published in the Journal of the Arkansas Medical Society I predicted that some day some laboratory investigator would work out a simple method to determine the conditions of other body fluids as was then known about the urine and a new

name would be added to the history of medicine. I now nominate Mr. Paul S. Tinkle for that honor.

The pH value or Hydr-gen-ion concentration, the qualitative and quantative measurement of acidity and alkalinity, may be estimated by several different methods. The most simple and practical I know is the PaulChrome method, devised by Mr. Paul S. Tinkle. One chemical indicator is used for all tests. This indicator is of such chemical nature that when added to the solution to be tested it produces a definite color or reaction showing its nature, that is, either acid, alkaline or neutral. By using this PaulChrome pH scale and the chemical indicator fluid, either test becomes as simple, easy and quick as taking the hemoglobin with the common hemoglobinometer. Either test can be made in one minute or less time.

To determine the reaction we will say of the urine, place 1. cc. of urine to be examined in a test tube, add two drops of the PaulChrome indicator, shake the tube and compare or match the resulting color to the pH scale or color meter.

Again the bio-chemists teach that all elements and compounds in the universe fall under the classification of being either neutral, acid or alkali in reaction and that cells, tissues and the various organs function best when the pH's are normal also the normal of pH can be seen in the definition of normal pH itself,—THE NORMAL pH OF ANY SYSTEM IS: THAT EXACT DEGREE OF ACIDITY OR ALKALINITY THAT HAS BEEN FOUND TO BE IN FAVOR OF THE PROPER FUNCTIONING OF THAT SYSTEM, THE TISSUES AND CELLS OF WHICH THE SYSTEM IS COMPOSED.

Acidosis is far more prevalent than alkalosis. Influenza, pneumonia, tonsilitis, erysipelas and practically all febrile conditions are preceded by acidosis. Acidosis is nearly always associated with pain and often with fever. It is an established fact that super-acid tissue is more easily infected than normal tissue.

What are we going to do about it? Look well after the tissues that harbor the foci of infection and if possible remove them. Correct any preventable fault, as wrong habits, diet and exposure. Avoid over-exercise and worry. Advise proper clothing, frequent bathing, deep breathing and plenty of sleep. Any pathological condition associated with acidosis can best be treated by alkalizing the patient in addition to the regular treatment. A patient with acidosis

should be advised to limit starches and proteins and exclude sweets entirely. Cool water, never iced, and citrus fruit juices before breakfast, between meals, and at bedtime, should be taken freely. These juices should never be taken with other food. Not more than one starch should be eaten at a meal. Fruits and cooked non-starchy vegetables should be the basis of the diet.

We have several tried and effective alkaline products to combat acidosis that will root for us and pep us up when we need assistance.

Potassium citrate or acetate, not more than one ounce of either per day is a good alkalizer. Sodium, calcium, and magnesium, all natural cell salts are good. A purgative is often of much benefit. For this laxative, milk of magnesia is a good pinch-hitter, as it is mildly laxative and a very good alkalizer.

Alkalosis is uncomfortable, but seldom dangerous, while a large number of the death certificates the doctor signs can be blamed on acidosis.

These tests are easily and quickly made simple but reliable and valuable in any case when it becomes necessary to know the chemistry of the body fluids to intelligently institute proper therapeutic measures.

If you are not familiar with these tests I trust you will add them to your knowledge. I am sure after you have derived the benefit accruing from them you will be highly pleased. For it pays to know the body fluid reaction of the patient.

COMING MEDICAL MEETINGS

American Medical Association, New York, June 10-14th, 1940.

First Councilor District Medical Society, Jonesboro, May 15th, 1940.

FOR SALE—Surgical and medical instruments,
in excellent condition, of the late Dr. J. L. Baird.
Write—Mrs. J. L. Baird, Marked Tree, Arkansas.

FEMORO-ILIAC THROMBOPHLEBITIS OF LOWER EXTREMITY Treated by Blocking the Lumbar Sympathetics with Novocain

RALPH E. CRIGLER, M. D.
Fort Smith

In a recent study of thrombophlebitis, Ochsner and DeBakey showed that the clinical manifestations of this most troublesome postoperative complication were due to vasospasm. For many years phlegmasia alba dolens, milk leg or thrombophlebitis, was explained in terms of obstruction in the flow of lymph. As a result of this theory many rather barbaric surgical procedures were devised, which many times crippled an individual for life.

Only a few years ago following the introduction of conservative treatment of varicose veins by sclerosing substances and even after ligation of the external saphenous vein observers noted that no edema followed such a procedure. It has been noted by various authors that the edema was greatly influenced by the presence or the absence of arteriolar pulsations. The absence of pulsations in the dorsalis pedis or the posterior tibial arteries is quite constant in a well-pronounced case of femoro-iliac thrombophlebitis. This is especially true if the edema is sufficiently pronounced to give a definite pallor to the skin which is always cold as compared to that of the opposite extremity.

Ochsner and DeBakey do not feel that blockage of the venous and lymphatic systems is of primary significance in the production of thrombophlebitis and feel that they have definitely shown that the symptoms and signs are due to a vasospasm of both the arterial and venous systems, primarily caused by the thrombus. These men reported the successful treatment of seventeen cases. They definitely showed that through interruption of the vasoconstrictor impulses by blocking the lumbar sympathetics with procaine hydrochloride, the vasospasm was removed and a normal exchange of intravascular and perivascular fluids resulted. Following such a procedure there was prompt and permanent relief of all clinical manifestations. In half of these cases the temperature returned to normal within forty-eight hours and the remaining half within one week. In over half the cases the edema subsided within eight days and the rest within twelve days.

It seems that the sooner this treatment, blocking the lumbar sympathetics, for femoro-iliac thrombophlebitis is instituted, the shorter the period of convalescence. If treatment is instituted at the onset usually one or two daily injections will suffice.

The technique is quite simple. The patient is placed in the lateral recumbent or Sim's position. The first, second, third and fourth lumbar vertebrae are located. The initial puncture site is approximately $1\frac{1}{4}$ to $1\frac{1}{2}$ inches lateral to the vertebral interspace. Using a number 20 or 21 gauge needle, $2\frac{1}{2}$ or 3 inches long, it is gently plunged perpendicularly through the skin until it hits the transverse process. The needle is then retracted slightly and rotated slightly downward and laterally to miss the transverse process, then inserted approximately $1\frac{1}{4}$ to $1\frac{1}{2}$ inches in order to reach the anterior-lateral aspect of the body of the vertebra. Ten cubic centimeters of 1% Novocain in saline is then injected so as to infiltrate the sympathetic ganglia. This same procedure is repeated opposite the second, third, and fourth lumbar vertebra. It should be repeated daily until there is definitely some relief of the pain, a drop in temperature, or a decrease in the swelling. The swelling, however, will usually be the last of the three to subside. In six of the cases reported by Ochsner and DeBakey only one injection was necessary, five cases required only two injections; three had three injections; one, four injections; one, five; and another, six.

CASE REPORT

On March 3, 1940, a forty-four-year-old white, married female was admitted to Sparks Memorial Hospital, complaining of severe constipation and intermittent attacks of obstipation during the previous four to five weeks. A diagnosis of carcinoma of the recto-sigmoid area was made and the patient was operated upon March 6, 1940. Upon exploration of the abdomen the recto-sigmoid area was found to be firmly fixed to the sacrum, very friable and with lymph nodes palpable along the aortic chain. The right ovary was nodular, indurated, and lying in the cul-de-sac, hanging from a pedicle. This was removed for biopsy, pathological report later showing colloid carcinoma of right ovary, metastatic. Due to the fixation, induration, and friability of the lesion resection was not considered. A double barrel colostomy was performed in the left lower quadrant and the abdomen closed.

The patient's postoperative course was uneventful until the fourteenth postoperative day when she complained of pain in her left groin and left thigh. The following day her temperature rose to 100° and the pulse to 104. A diagnosis of iliofemoral thrombophlebitis was made. Despite conservative treatment, elevation, heat, narcotics, etc., the pain persisted, swelling increased until on March 26, 1940, six days following onset of pain the left thigh and leg was approximately twice the size of the right lower extremity. At this time 20 ccs. of 1% Novocain in saline was injected into the sympathetic chain, left side, in four injections opposite the first, second, third and

fourth lumbar vertebra as described in technique given above. She noticed very little relief during the following twenty-four hours, although she did require less narcotics for relief of pain. This procedure was repeated the following day using 32 ccs. and the third day using 40 ccs., and the fourth day using 60 ccs. The last injection was given March 29, 1940.

Five days after the first injection was given the temperature dropped to normal and the swelling and pain disappeared. She has been free of pain and swelling ever since and her temperature has remained normal. She was discharged April 3, 1940. She has been up and about each day since leaving the hospital with no recurrence of pain, swelling or fever.

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OBSTETRIC COURSE

Through the cooperation of the Illinois State Department of Public Health, the Division of Child Hygiene; and the Children's Bureau, U. S. Department of Labor, The Department of Obstetrics and Gynecology of the University of Chicago and the Chicago Lying-in Hospital is offering five to six weeks postgraduate courses in obstetrics for practitioners during the next several months.

Except for a deposit of \$25.00 (\$10.00 is returned at the completion of the course) the only expense to the individual will be that of his board and room, and his own personal incidental expenses. The enrollment for each course will be

kept small to promote a direct and personal relationship between the practitioners and the staff. Detailed information will be mailed to you shortly.

The first three periods are set for April 29, 1940, to June 8, 1940; June 17, 1940, to July 20, 1940, and July 22, 1940, to August 24, 1940. Since many of your physicians depend upon you for information and advice in postgraduate work, this preliminary information has been sent to you at this time with the thought that you may pass it on to them. Interested physicians may communicate with us directly or through you by addressing: Postgraduate Course, Department of Obstetrics and Gynecology, 5848 Drexel Avenue, Chicago, Illinois.

A. M. A. MEMBERSHIP AND FELLOWSHIP DEFINED

Every Member in good standing in the constituent state medical association where he is engaged in practice, whose name is officially reported to the Secretary of the American Medical Association for enrollment, becomes automatically a Member of the American Medical Association and is not called on, as such, to pay any dues or to contribute financially to the Association.

Members of the American Medical Association who graduated at recognized medical schools are eligible to apply for Fellowship.

To qualify as a Fellow, a Member in good standing is required to make formal application for Fellowship, to pay Fellowship dues and to subscribe for The Journal. Applications must be approved by the Judicial Council. Fellowship dues and subscription to The Journal are both included in the one annual payment of \$8.00, which is the cost of The Journal to subscribers who are not Fellows.

Only those Members who qualify as Fellows are eligible for election as officers; none but Fellows may serve as Members of the House of Delegates; none but Fellows may register at the annual sessions of the Association or may participate in the work of its scientific sections.

Members of state medical associations pay dues to those bodies, but they pay nothing to the American Medical Association. Fellows pay dues and subscription to The Journal in the sum of \$8.00 a year, which has nothing to do with county or state dues.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

HIPPOCRATES noted that there is an association between pulmonary and intestinal tuberculosis. But even to the present day the exact relationship of pulmonary to intestinal tuberculosis has remained obscure. Light is shed on the subject by correlating the clinical with the pathological findings, as was done at Sea View Hospital where more than one thousand cases of tuberculosis were autopsied. A summary of the article describing the study, together with brief comments, follows:

INTESTINAL TUBERCULOSIS

1. A study of 1,043 autopsied cases of tuberculosis is presented with an incidence of 734 cases, or 70.4%, intestinal tuberculosis.

The study included all cases of tuberculosis, both pulmonary and extra-pulmonary, which were autopsied during a five-year period, 1934 to 1938.

2. Intestinal tuberculosis is less extensive and less frequent above the age of forty.

The greatest number of cases occurred between the ages of 20 and 39 years—76% in this age group showed intestinal involvement. When cases of intestinal tuberculosis are divided according to the extent of intestinal involvement, it is found that in the older age groups, intestinal tuberculosis when present, tends to be less extensive. The lower incidence and extent of intestinal tuberculosis in the older age group has never been satisfactorily explained.

3. Intestinal tuberculosis is more extensive and frequent in females and in Negroes than in males and whites.

In the material studied, there were about twice as many males as females, and among these the incidence of intestinal tuberculosis was 74.6% in the females and 68.2% in the males.

The incidence in the white race was 66.4%; Negroes 77.3%.

4. Although caseous pneumonic tuberculosis is the type of pulmonary disease most frequently

associated with intestinal tuberculosis, the cases with acute miliary tuberculosis showed a surprisingly high incidence of 63.8% intestinal involvement.

Most workers believe that direct contact of the tubercle bacilli in the sputum on the intestinal mucosa is the most important single factor in producing intestinal tuberculosis. A few believe that hematogenous dissemination is the chief method. With that in mind, the cases studied were divided according to the character of their pulmonary disease.

The high incidence in acute miliary tuberculosis seems to indicate that the hematogenous route of intestinal involvement is much more common than generally supposed. One is also led to suspect that the bacilli-laden sputum that is swallowed often only modifies the extent and size of the intestinal ulcers and is not itself the cause of intestinal tuberculosis.

5. The incidence of caseous mesenteric lymph nodes and miliary foci in the liver and spleen increases with the severity of intestinal tuberculosis.

Caseous mesenteric lymph nodes were found in 43% of the very far advanced cases. The high incidence of miliary foci in the liver (49.4%) and spleen (47.8%) is interesting when it is considered that only routine sections were taken—more careful search would probably have yielded a higher incidence.

6. Intestinal tuberculosis is most frequent in the ileocecal region.

In this series of 734 cases of intestinal tuberculosis the ileum was involved 652 times and the cecum 555 times. Extension of the tuberculous process is more frequently analward than toward the stomach, which was involved in only 4 cases. The small intestine was involved alone more frequently than the large intestine.

The character of the intestinal lesions varies just as in tuberculosis of other parts of the body. The earliest lesions are in the lymphoid tissue of the submucosa principally in Peyer's patches. The area of caseation finally involves the mucosa and ulceration results. The healing process consists of fibrosis of the specific tubercles followed by epithelial regeneration. The necrotic material sloughs out and the contraction of the fibrous tissue tends to approximate the edges of the ulcer. The uninjured epithelial cells at the border of the ulcer creep in and finally cover the floor of the ulcer.

7. Perforation of a tuberculous ulcer occurred in 28, or 3.81%, of the cases with intestinal tuberculosis. It occurred most frequently in the ileum.

Perforation caused a generalized peritonitis in 10 cases, a localized peritonitis in 16 cases. Three perforations were extra peritoneal. Twice, ulcers in the rectum penetrated into the perirectal tissues and once an ulcer in the cecum penetrated retroperitoneally. Perforation occurred most often in the ileum and next more often in the appendix.

8. Generalized tuberculous peritonitis except in those cases due to perforation of a tuberculous ulcer, is not related to intestinal tuberculosis.

Tuberculous peritonitis, not associated with intestinal tuberculosis, occurred in 52 instances.

9. The incidence and severity of intestinal tuberculosis is much less in those cases which have had pulmonary symptoms one to two years.

The frequency of intestinal tuberculosis is related to the duration of the pulmonary disease. The highest incidence of intestinal tuberculosis occurs in cases with pulmonary symptoms of one year to 23 months duration before death. As the duration of pulmonary symptoms increases the incidence and severity of intestinal tuberculosis decreases. Just why cases of long duration

should not develop intestinal tuberculosis in spite of persistently positive sputum is not known.

10. The incidence and severity of intestinal tuberculosis is directly related to the positivity of the sputum.

The frequency and severity of intestinal tuberculosis was correlated with the degree of positivity of the sputum. Except for those cases which were positive on concentration only, the incidence and extent of intestinal tuberculosis increases as the number of tubercle bacilli in the sputum increases. Cases that had a mean Gaffky count of XII-X had an incidence of 83.5% intestinal involvement. Cases that were negative on concentration had an incidence of 40.4%.

11. The symptoms of intestinal tuberculosis are frequently misleading and are often present in cases without an intestinal involvement.

Symptoms and signs may be bizarre, slight and easily overlooked. Symptoms became more frequent as the severity of intestinal involvement increased.

12. The diagnosis of intestinal tuberculosis based on roentgenograms was inaccurate in 29.2% of the 113 cases studied roentgenographically and at post mortem.

Another writer found the intestinal X-ray unreliable in 52% of his autopsy series of 67 cases. The autopsy fails to substantiate many cases diagnosed as intestinal tuberculosis on X-ray. It is admitted that pseudo filling defects seen on the X-ray may have been misinterpreted as evidence of organic disease, since fluoroscopy as recommended by Brown and Sampson was not done.

The other factor that accounts for some of the disagreement found between X-ray and autopsy is the fact that an attempt was made to diagnose tuberculosis of the ileum on X-ray. The X-ray criteria of tuberculosis of the ileum-dilatation, segmentation, and stasis, are not as accurate as the criteria for diagnosis in the cecum and colon.

Intestinal Tuberculosis, James H. Cullen, M. D., Quarterly Bulletin of Sea View Hospital, Vol. V, No. 2, Jan. 1940.

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EDITORIALS

THE FORT SMITH SESSION

An enthusiastic attendance marked the 65th
annual session of the Society in Fort Smith April
15-17th. 265 members of the Society were reg-
istered. The total registration was 380. The pro-
gram was of exceptional interest and the Sebas-
tian County Medical Society provided delightful
entertainment.

The following officers were elected President,
H. T. Smith, McGehee; President-Elect, H. Fay
H. Jones, Little Rock; First Vice-President, I. Ful-
ton Jones, Fort Smith; Second Vice-President,
H. V. Kirby, Harrison; Third Vice-President, C.
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dora; Councilor, Sixth District, H. E. Murry, Tex-
arkana; Councilor, Eighth District, F. A. Corn, Jr.,
Lonoke; Councilor, Tenth District, Clyde McNeil,
Rogers; Delegate to the American Medical Asso-
ciation, E. E. Barlow, Dermott, and Alternate,
A. S. Buchanan, Prescott. The 1941 meeting was
awarded to Little Rock. The Council reorganized
following the session, electing R. B. Robins, Chair-
man, and Euclid Smith, Secretary.

Among action of interest in the House of Dele-
gates was the recommendation that the Arkansas
State Board of Health provide a full-time instruc-
tor in obstetrics; that county medical societies
appoint a committee on cancer control to coop-
erate with the Women's Field Army; that a dis-
tinguished service medal be awarded annually;
approval of the Platform of the American Med-
ical Association, and approval of an annual regis-
tration fee of physicians in the state.

PEDIATRIC REFRESHER COURSE

The third series of refresher courses conducted
in Arkansas under the joint auspices of the Com-
mittee on Maternal and Child Welfare of the
Arkansas Medical Society and the Arkansas State
Board of Health will be conducted in a six-week
period beginning May 20th. The instructor will
be Dr. Jean Valjean Cooke, Associate Professor
of Obstetrics in the Washington University
School of Medicine, Saint Louis. Dr. Cooke con-
ducted a similar course in the state in 1938.

Lectures will be held as follows, the lecture be-
ing 7:30 P. M.:

Fort Smith—Mondays—May 20th, May 27th,
June 3rd, June 10th, June 17th, and June
24th. Auditorium, Saint Edwards Mercy
Hospital.

Prescott—Tuesdays—May 21st, May 28th, June
4th, June 11th, June 18th, and June 25th.
Loda Hotel.

McGehee—Wednesdays—May 22nd, May 29th,
June 5th, June 12th, June 19th, and June
26th. Greystone Hotel.

Searcy—Thursdays—May 23rd, May 30th, June
6th, June 13th, June 20th, and June 27th.
Auditorium, City Hall.

Jonesboro—Fridays—May 24th, May 31st, June
7th, June 14th, June 21st, and June 28th.
Noble Hotel. At Jonesboro a dinner at
6:45 P. M. will precede the meeting, price
seventy-five cents.

All licensed physicians in Arkansas are invited
to the lectures. It is hoped that the members of
this Society will attend in greater number than
at previous courses.

PROCEEDINGS OF SOCIETIES

The Graighead-Poinsett County Medical Society met March 4th for the following program: "Pre-Natal Care," J. T. Altman, and "Obstetrics in the Home," J. H. McCurry.

M. L. Cantrell, Secretary.

The Benton County Medical Society met in dinner session at Rogers April 11th for the following program: "Gynecology and Obstetrics with Some Side Lights of New Orleans," Guy Hodges, Rogers.

Geo. M. Love, Secretary.

The Second Councilor District Medical Society met in dinner session at Batesville April 8th for the following program: "Laboratory Service in Preventive Medicine," H. B. Stewart, Little Rock; "Management of Hyperthyroidism," Geo. V. Lewis, Little Rock; and "Inhalation Therapy," Wayne M. Hull, Oklahoma City.

The Sebastian County Medical Society was addressed May 9th by Fred H. Krock on "Common Gynecologic Problems."

Ralph E. Weddington, Secretary.

The Arkansas State Pediatric Society met at Fort Smith April 15th, the meeting being addressed by S. G. Wolfe, Shreveport, on "The Use of Convalescent Serum in the Treatment of Communicable Diseases." Officers elected are: President, C. B. Billingsley, Fort Smith; Vice-president, W. R. Parsons, Little Rock, and Secretary-Treasurer, Ralph E. Weddington, Fort Smith.

The Lawrence County Medical Society was addressed April 9th by W. W. Hatcher, Imboden, "Angina Pectoris," and T. C. Guthrie, Smithville, "Physical Diagnosis."

T. C. Guthrie, Secretary.

Membership and activity in the county medical society is the best evidence of a doctor's conformity to the highest standards of medical practice.—The Journal of the Medical Society of New Jersey.

PERSONALS AND NEWS ITEMS

R. B. Robins, Camden, addressed the Waldo Lions Club on its charter presentation night.

Drs. E. E. and Brian E. Barlow are erecting a clinic building at Dermott.

Fred H. Krock, Fort Smith, addressed the Senior High School P. T. A. April 8th on "Cancer Control."

The Arkansas Tuberculosis Association has elected the following officers: President, A. C. Shipp, Little Rock; Secretary-Treasurer, S. F. Hoge, Little Rock, and Directors, J. D. Riley, State Sanatorium; B. E. Barlow, Dermott, and H. J. Mayfield, El Dorado.

I. F. Jones recently addressed the Fort Smith Pilot Club on "Cancer Control."

Geo. M. Love has been elected a director of the Rogers Rotary Club.

"Spa Therapy in Rheumatic Diseases," by Euclid M. Smith and Charles H. Lutteroh, Hot Springs National Park, appeared in the March issue of Archives of Physical Therapy.

J. R. Kitley has been elected to his twelfth term as mayor of Mayflower.

BORN—On March 24th, a daughter, to Dr. and Mrs. John E. Parsons, Little Rock.

BORN—On March 29th, a daughter, to Dr. and Mrs. Noel Copp, Calico Rock.

J. K. Donaldson has been elected third vice-president of the Little Rock Optimist Club.

Earle D. McKelvey has been elected president of the Paragould Rotary Club.

Thos. Wilson is adding five rooms to his clinic building at Wynne.

E. P. McGehee, Lake Village, took a cruise to Panama, Havana, and Honduras in March.

Fred H. Krock, Fort Smith, addressed the Woman's Auxiliary to the Sebastian County Medical Society April 1st on "Cancer Control."

Dr. and Mrs. J. F. McKnight, Bradley, were recently honored on the occasion of the fiftieth anniversaries of their membership in Walnut Hill Lodge, No. 188, F. & A. M., and Walnut Hill chapter of the Eastern Star.

The glass collection of Dr. and Mrs. L. S. Dunaway, Jr., Conway, was the subject of a feature article in the Arkansas Gazette March 24th.

BORN—On March 16, a son, to Dr. and Mrs. R. L. Taylor, Conway.

W. C. Langston, Little Rock, recently addressed the Pre-Med Club of Monticello A. & M. College.

MARRIED—On March 26th, H. S. Stern and Miss Jane Rita Ellenbogen, at Little Rock.

R. M. Sloan, Jonesboro, has been elected vice-president of the Craighead County chapter of the National Foundation for Infantile Paralysis.

M. W. Chastain has been elected a director of the Bentonville Rotary Club.

The following attended the session of the American College of Physicians in Cleveland during April: A. A. Blair, Fort Smith; Chas. T. Chamberlain, Fort Smith; J. N. Compton, Little Rock; Raymond Gregory, Little Rock; L. D. Massey, Osceola; Madeline Melson, Little Rock, and O. C. Melson, Little Rock.

Fred H. Krock, Fort Smith, recently addressed the District 4-A Nurses Association.

Chas. S. Holt and Raymond T. Smith, Fort Smith, attended the meeting of the Midwest Hospital Association in Kansas City during April.

W. C. Porter, Ozark, has been elected president of the Coal Belt Baseball League.

Hoyt R. Allen has been elected a director of the Little Rock Rotary Club.

J. Harry Hayes, Little Rock, attended the sessions of the American Society for the Study of Goiter at Rochester, Minnesota, during April.

The first issue of The Holt-Krock Clinic Bulletin, Fort Smith, appeared in April.

Euclid Smith, Hot Springs National Park, addressed the Fort Smith Rotary Club April 17th on "Arthritis."

S. P. Cromer, Little Rock, addressed the Fort Smith Lions Club April 16th on "The University of Arkansas School of Medicine."

Among the county chairmen of the early diagnosis campaign of the Arkansas Tuberculosis Association are Geo. M. Love, Rogers, and H. J. Mayfield, El Dorado.

Thos. Douglass has been elected president of the Ozark Rotary club.

J. L. Pickens, Bentonville, has been selected as assistant resident surgeon at Charity Hospital, New Orleans.

J. S. Stell recently addressed a public meeting at Hot Springs National Park on "Cancer Control."

Elizabeth Fletcher, Little Rock, recently addressed the El Dorado High School P. T. A. on "Social Hygiene."

R. E. Schirmer is conducting first aid classes for the Red Cross at Blytheville.

R. B. Robins, Camden, addressed the student body of Henderson College, Arkadelphia, March 20th on "Preparation for a Medical Career."

J. O. Leslie, Marshall, has been appointed local surgeon for the M. & A. Railway.

OBITUARY

GEORGE ALBERT CAUSEY, aged 66 years, died at his home in Swifton March 20th after a long illness. A graduate of the Memphis Hospital Medical College in 1900, he had practiced in Jackson County for 35 years. During the World War he served in the Army medical corps. He was a member of Thornburg Lodge No. 371, F. & A. M. at Alicia. Surviving relatives are his wife, a son and a daughter.

WILLIAM LEE HARPER, aged 66 years, died at his home in Junction City March 22nd after a prolonged illness. Born in Summerfield, Louisiana, March 11, 1874, he attended public school at that place and later graduated from Hendrix College. He received his medical degree from Louisville Medical College in 1894 and subsequently took postgraduate work at Tulane University. He first practiced at Wilks, Arkansas, later moving to Atlanta, Arkansas, and thence to Junction City in 1905. He was married to Miss Cassandria Marion Whitehead on October 28, 1894, who, with three daughters and a son, Dr. John William Harper of El Dorado, survive him. In the Methodist church he was an active worker, having served as chairman of the board of stewards for a number of years. He was also affiliated with the Masonic bodies.

HERMAN CASTILE, aged 51, of Foreman, died in a Little Rock hospital March 29th of heart disease. Born at Brinkley, June 12th, 1882, he completed his medical education at the University of Louisville School of Medicine in 1911 and took postgraduate work at Tulane and Columbia universities. In addition to his membership in the Little River County Medical Society and the Arkansas Medical Society, he was a fellow of the American Medical As-

sociation, a member of the Methodist church, and affiliated with the Scottish Rite Masonic bodies. Surviving relatives are his wife, three daughters and a son.

WALTER H. ESTES, age 63 years, of Sage died March 29th. For the past 40 years he had practiced in Izard, Sharp, Stone and Independence counties, having been located at Sage since 1936. He was married to Miss Dona Montgomery of Oxford on January 3, 1903, who, with two daughters, survives him. In addition to his membership in the Independence County Medical Society and the Arkansas Medical Society, he was a member of the Church of Christ.

GUY ARNOLD McCORMACK, age 67, died at Little Rock, April 6th. Born in Pulaski, Tennessee, December 24, 1873, he moved to Arkansas with his parents at the age of nine. His public school education was obtained in the schools of Lonoke county and he graduated from the University of Arkansas School of Medicine in 1914. For several years he operated drug stores at Butlersville and Goodwin. During the Spanish-American War, he served with the Eagle Rangers and during the World War he served as a first lieutenant in the army medical corps. In addition to his membership in the Pulaski County Medical Society and the Arkansas Medical Society, he was a member of the Little Rock post of the American Legion, the Chi Zeta Chi fraternity and the Masonic bodies. He was married to Miss Ella Phillips on November 20, 1890, who, with a son, survives him.

JAMES A. HENLEY, age 73, died at his home in Marshall April 14th. A graduate of the University of Tennessee College of Medicine in 1894, he had practiced for many years at Saint Joe and Marshall. Surviving relatives are his wife and six daughters.

RANDOM THOUGHTS OF THE SECRETARY

March 29th. Casting all restraint aside, the family takes off this afternoon, first visiting the newly-arrived Shetland ponies at the veterinary hospital, where the attending obstetrician reveals some of his worries with parents and visitors while the monkey gallery keeps up incessant chatter, making the place resemble many a well-ordered, standardized hospital. Thence upon Highway 71 where full enjoyment of the glorious day is possible, climbing the top of Gaylor tower for a look-about, the early blossoms just beginning to open but as yet not much green. At Fayetteville airport the youngster bums a ride and the two of us get our first birds-eye view of Fayetteville, the stadium being particularly impressive at an altitude. To dinner realizing full well that "Adventures in Good Eating" did not visit Fayetteville on a night like this.

April 2nd. B. W. Freer, realizing the worth of flowers while life is with us, calls to offer kind words for this column, the first good turn to the column in 1940.

April 3rd. Busily engaged in our military duties at the armory, we are pleasantly surprised by a visit from the militant medical major from the 142nd Field Artillery, Fount Richardson, who proceeds to give in great detail the activities of the busiest doctor in Arkansas, none other than he. And so passed an entertaining drill period.

April 8th. Taking the gravel highway 25 to Batesville, shorter and well-worth the trip for the three breath-taking panoramas which unfold to view on this route, ranking along with that from Mountainburg hill and the pinnacle view from number seven out of Jasper. Meeting once again with the second district, surprised to note Sam Allbright late for dinner. Saying our say to the joint dinner session, where Wyatt replies to the request that he "get something off his chest," that he has just finished putting "something into it," a pathologic-anatomical observation readily discerned. Hawkins hints that we endow a room in his new hospital, evidently unaware that we have just endowed a couple of rooms in the homestead. Regrettably forced to decline invitations for post-mortem sessions with the Johnstons, Monforts and Churchills, we take ourselves homeward, discovering that while Heber Springs may have abundant and varied spring water available, there is naught but poor coffee in the town tavern this night. So completing a 440-mile trip thirteen hours after the start, wondering along the last 100 miles if there be any wayfarers other than rabbits, truck drivers and state secretaries.

April 13th. We busy ourselves with final preparations for the annual session and find everything in proper order. Our customary resolution to get a good night's sleep this night in anticipation forgone as is also customary.

April 14th. Denied the distinction of being the first county society secretary to remit dues for 1940, F. D. Smith steps forth to acquire another first—the first member to register for the session. The Euclid Smith's drive in, reporting that they drove it in one hour—and then stopped for a picnic lunch. For the item in *The Journal* stating that Euclid and Pop made the trip to Mexico together, we extend apologies to both. In the evening gathering at Wolfermann's for a prenatal clinic to the convention, again finding much of promise for a good

meeting. This gathering is unique in that it is composed of the crew which usually holds the postmortem.

April 15th. The early risers, Barlow, Tate, Jameson, Allbright, are comfortably seated in the hotel lobby when we appear on the scene at 6:45 A. M. Assisted in the preliminary registration by a new-found hand at this, Wolfermann. Later arrivals become impressed with the decided advantages of making reservations and shuffle off down the street to another hostelry. The Council luncheon plays to a capacity crowd, largely because our written diagram has been superseded by some idea acquired on the lobby floor (alibi). Kimball, pinch-hitting in the response to welcome, talked as if he meant it. Skinner steps up and really tells us about it, a typical dynamic talk such as he alone makes. Jones appears for the public meeting fancifully garbed in a Tuxedo—a mark of distinction. Jo Parmley brings memories to all of us memories of other days, ever to be cherished. The final act of the day, the open houses, where merriment abounds, close harmony ultimately appearing, as was to be expected from the start, the principal instigators being Rosenbaum, Don Smith and Bob Mackin.

April 16. A memorial service of dignity and beauty honors the colleagues who answered their "last call" during the year. Folks seem to be a bit tardy about getting up this morning but quite expressive over the fun of last night. In our efforts to keep the hall in shape we knock down two shades and Al forbids us to touch them for the rest of the session. At the Council luncheon, H. Moulton absent until now, brings smiles to all and it is good to see him once again at the table. The eye section again well attended, confirming their contention that they wanted a separate section. Today Lockwood comes to town and his many friends give him back slaps and handshakes which would gladden any heart. The golfers fare forth in the afternoon but we miss that delegate golfer, Alfred Hathcock, who doubtless got a good start this morning. Berry Moore gets much discussion and we know the answer. Late in the afternoon, Clyde Rodgers busies himself counting fetal heart beats (?), informing us that the rate was 120. Right? Comes the buffet supper and dance which lasts till a late hour, during most of the time Bob Robbins goes about quoting this column, with interludes when Wharton assumes the role of chief sanitary officer and Goldstein joins the eye section for social purposes.

April 17th. For the closing day much rain falls and there is comment over all that good water going to waste on the streets when alimentary tracts are so dehydrated. The opening session sparsely attended but Berry Moore presides with decorum, a revealing incident. This day we buy Stough's first breakfast; George Fletcher is host at the second. Curbed until today, Clyde McNeil monopolizes the floor at the Council luncheon with his sole interest—the F. S. A. Election and routine business disposed of, including thwarting of the grasping proclivities of the secretary, farewells are said and highways 64 and 22 see many home-bound medicos. Us to the accumulated professional work, taking time out to wave the Robins-Moore-Wharton motorcade away after they have cleaned out the provisions at Foltz manor.

April 19th. Attending Federal inspection of the National Guard, astounded when none of the enlisted personnel of the Medical Detachment, 142nd F. A. are able to answer the question: "Who is the senior medical officer of the detachment?"

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Before long the Woman's Auxiliary to the American Medical Association will be convening at the Hotel Pennsylvania, New York City, for their 18th annual convention. The meeting will be held June 10th-14th, 1940. Is your reservation in? We are sure you will want to stay at the headquarters, Hotel Pennsylvania. In order to get a reservation, mail your request today to Dr. Peter Irving, Housing Bureau, Room 1036, 233 Broadway, New York City, N. Y.

March was a busy month for the Washington County Auxiliary. There was a good attendance at the dinner meeting March 5th. Dr. Harrison, medical missionary to Arabia, was guest speaker for medical society and we were invited to hear him. His talk was very much appreciated by the society and the Auxiliary.

A tea was given March 15th at which time the Auxiliary sponsored the annual hospital shower. This was quite a success. The clubrooms were well-arranged and were beautifully decorated with spring flowers.

The Auxiliary met again March 21st and selected the officers for the coming year, as follows: President, Mrs. James Lewis; vice-president, Mrs. H. H. Howze; secretary, Mrs. R. T. Henry, and treasurer, Mrs. Richard Miller.

The Auxiliary contributed \$13.00 to the student loan fund.

The Ouachita County Medical Society Auxiliary held a luncheon meeting March 15th, in the home of Mrs. R. B. Robins with Mrs. J. S. Rinehart as co-hostess. Lovely spring flowers centered the table, which was covered with a handsome embroidered cloth. Mrs. R. H. Whitehead, Jr. and Mrs. B. V. Powell served. Smaller tables were placed in the living room.

Mrs. Harvey Shipp of Little Rock and Mrs. Berry Moore of El Dorado were guests.

Mrs. Whitehead read a paper on "Cancer."

Mrs. Thompson and Mrs. Kennedy were elected delegates, and Mrs. Jameson and Mrs. Whitehead, alternates.

Officers elected for the coming year were: President, Mrs. B. V. Powell; President-Elect, Mrs. S. D. McGill; Vice-President, Mrs. T. E. Rhine and Secretary-Treasurer, Mrs. R. H. Whitehead, Jr.

The Crittendon County Medical Society Auxiliary elected the following officers for the coming year: President, Mrs. J. T. Irby; Vice-President, Mrs. H. S. Watson; Secretary, Mrs. T. S. Hare, and Treasurer, Mrs. J. H. Matthews.

Mrs. Hare was appointed delegate to the state meeting. "Health Education" and "Health Exhibits" will be held in April in connection with the health program of the P. T. A.

The Auxiliary sponsored the placing of drinking fountains in the new play-grounds for small children to be ready before summer, and will assist the county health doctor and nurse with pre-school clinic and summer round-up.

Mrs. J. F. Blalocks resignation was accepted. Dr. and Mrs. Blalock have moved to Nashville, Tenn., where Dr. Blalock is with Central State Hospital as Consulting Psychiatrist. Their departure is deeply regretted, both being young in years as well as in medical work. Our membership is small but we are interested in the work.

The Pulaski County Medical Society Auxiliary held an open meeting February 21st at the University of Arkansas Medical School. Mrs. W. A. Lamb, of the Public Relations Committee, introduced Dean Stuart P. Cromer who, in turn, introduced Dr. A. S. Buchanan, of Prescott, president of the Arkansas Medical Society. Dr. Buchanan spoke on "Socialized Medicine." Mrs. C. E. Kitchens, of DeQueen, president of the Arkansas Medical Society Auxiliary, told the story of Jane Todd Crawford. Tea was served by a committee composed by Mrs. E. H. White, Mrs. G. W. Reagan and Mrs. B. L. Robinson. Mrs. L. F. Barrier and Mrs. W. N. Freemyer poured tea, assisted by Mrs. Harvey Shipp.

The Pulaski County Medical Society Auxiliary met March 20th at the home of Mrs. L. F. Barrier with Mrs. A. C. Shipp, Mrs. B. A. Bennett, Mrs. Homer Higgins and Mrs. Randolph Smith as co-hostesses. Jonquils, forsythia and other spring flowers were used throughout the rooms. A buffet luncheon was served from the dining table which was covered with a lace table cloth and centered with a silver bowl filled with jonquils and spirea. Mrs. J. Palmer Sheppard and Mrs. J. P. Runyan presided at the table. Mrs. Barrier presided over the business session when reports were given by Mrs. T. D. Brown, Mrs. C. A. Rosenbaum and Mrs. Higgins. There were 40 members present. Guests were Miss Erle Chambers and Mrs. Barney Briggs.

The Bowie-Miller County Medical Society Auxiliary met March 22nd, at the home of Mrs. L. J. Kosminsky. Hostesses for the afternoon were Mrs. Kosminsky, Mrs. P. H. Phillips, Mrs. J. F. Williams, and Mrs. A. G. Lee.

Mrs. Ralph Cross, president, directed the business session during which delegates were elected to the Arkansas Medical Society convention, April 15, 16, 17, in Ft. Smith, as follows: Mrs. Ralph Cross, Mrs. L. J. Kosminsky and Mrs. P. H. Phillips. Delegates to the Texas meeting in Dallas, in May, were also elected as follows: Mrs. S. A. Collom, Jr., Mrs. Ralph Cross and Mrs. William Hibbitts.

At the conclusion of the business, Mrs. Chester Gitchens, chairman of the health committee, introduced the winners in the essay contest on conservation of vision, which is held annually in the junior high schools of Arkansas. Winning essays were read by Jean Carroll, Mary

Louise Freeman, Zell Holman and D. T. Cigainero, who were awarded cash prizes by the Auxiliary.

Mrs. Kosminsky's home was beautifully decorated for the meeting with numerous bowls of spring flowers in bright colors. A delicious salad course was served, carrying out an Easter motif. The meeting was well-attended.

Mrs. N. J. Pickett was a guest. New officers for the year were named.

Dr. E. J. Easley, director of the Miller county health unit, delivered a radio address, April 4th, over KCMC on "Cancer Control." The address was in line with Texarkana's observance of Cancer Control Month, sponsored by the Bowie-Miller County Medical Society.

The Auxiliary to the Garland County Medical Society met March 26th, 1940, at the home of Mrs. Geo. B. Fletcher. A morning coffee, honoring the state president, Mrs. Chas. E. Kitchens, the wives of the Army and Navy doctors, and the wives of the doctors in the public health service. Mrs. W. G. Klugh, president, presided.

A motion was made and seconded that the Auxiliary equip four Hot Springs students and one Malvern student with necessary glasses. Motion carried.

Mrs. J. S. Stell, chairman of Exhibits, reported that pupils in the Junior High School were making posters for the state exhibit.

Mrs. Klugh reported that Ramble school had co-operated in the campaign for Diphtheria and Scarlet Fever Prevention.

Mrs. Charles H. Lutterloh and Mrs. R. Y. Phillips were elected official delegates to the state convention, with Mrs. Euclid Smith and Mrs. B. F. Casada alternates.

The report of the nominating committee included the following list of officers for 1940-1941:

President—Mrs. W. G. Klugh.

Vice-President—Mrs. Raymond McCray.

Secretary—Mrs. J. B. Strachan.

Treasurer—Mrs. J. S. Stell.

Historian—Mrs. C. H. Nims.

The slate was accepted as presented, and the nominees elected by acclamation.

Mrs. Kitchens addressed the meeting on the "Aims and Accomplishments of the Auxiliary."

Adjournment.

The doctors of Monticello entertained the Southeast Arkansas Medical Society and Auxiliary with a chicken dinner at the Ridgeway hotel on March 18th.

The long T-shaped table was lovely with many glass bowls of Japonica, Baby's Breath, and Spirea. There were

38 guests, all in a mood to enjoy the delicious plate dinner.

Immediately after dinner was served, the poems "To our Doctors" and "Why I Am A Doctors Wife" were read in commemoration of Doctors Day. Dr. Douglas of Eudora responded with a word of appreciation.

The ladies retired to the ladies parlor for the business meeting. Reports were read and the following officers were elected:

Mrs. Chas. Dixon, Gould, President; Mrs. H. T. Smith, McGehee, Secretary; Mrs. M. C. Crandall, Wilmot, Publicity Chairman.

Mrs. J. S. Wilson as hostess, presented a geographical quiz and a test in free-hand drawing. Several prizes were awarded. The guest for the evening was Mrs. B. P. Briggs of Little Rock.

Mrs. M. E. Foster was elected president of the Auxiliary of the Sebastian County Medical Society at a luncheon and business meeting April 1st at the home of Mrs. Ruth Moss Carroll.

Mrs. Foster will succeed Mrs. I. F. Jones, who automatically becomes vice-president. Mrs. Ralph Weddington succeeds Mrs. W. F. Adams as secretary. Mrs. S. P. Stubbs, elected treasurer, succeeds Mrs. B. Wayne Freer.

Monday's meeting was called by the president, Mrs. I. F. Jones, a week in advance of the scheduled meeting date, the second Monday of the month, to make final plans for the convention of the Arkansas Medical Society and Arkansas Medical Society Auxiliary to be held in Fort Smith April 15, 16 and 17 and to elect officers.

The slate prepared by the nominating committee, comprising Mrs. Fred Krock, chairman, Mrs. A. A. Blair, and Mrs. J. S. Southard, was unanimously approved. Mrs. S. J. Wolferman, chairman of the committee for the Hygeia, American Medical Association publication, reported the sale and renewal of 26 subscriptions. The Auxiliary presents the Hygeia to seven rural schools in the county, a subscription to the Girls' club, and the Young Women's Christian association, the Carnegie library and the Rosalie Tilles Children's home.

Mrs. W. F. Rose, Publicity Chairman of the Auxiliary of the Sebastian County Medical Society.

... For my part I am still unconvinced that the family doctor is an anachronism. I still want somebody to save me from unsuitable or excessive specialist advice; I need someone to co-ordinate the findings of specialists and discount them if necessary; and above all I want someone who is willing to talk to me, at length, about my migraine, my little boy's delinquencies, my wife's recent strangeness, my baby's inoculation, and my daughter's desire to marry a man with asthma.—Onlooker, Lancet.

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BOOK REVIEWS

Ten Years in the Congo: By W. E. Davis, M. D. Pp. 301. Price \$2.50. New York: Reynal and Hitchcock, 1940.

The experiences of a medical missionary in the Congo, most interesting and readable. The author has a rare gift of description and character depiction. A keen sense of wit as well as a keen sense of character analysis adds materially to the enjoyment of this volume. The reader is enabled to see the Congo through the eyes of the author. Those who enjoy reading the medical experiences of another physician, have several delightful hours in prospect when you open this book.

Pneumoconiosis (Silicosis): The Story of Dusty Lungs: By Lewis Gregory Cole, M. D., Director of Silicotic Research, John B. Pierce Foundation, and William Gregory Cole, M. D., New York. Pp. 69. 28 illustrations. Price \$1.00. New York: John B. Pierce Foundation, 1939.

With characteristic Cole thoroughness this important subject is presented in an orderly, lucid manner, free of technical language. Every phase of the problem of pneumoconiosis is discussed.

Medical Care—Law and Contemporary Problems: Edited by Prof. David F. Cavers. Pp. 186. Price \$.75. Durham, North Carolina, School of Law, Duke University, 1939.

The Autumn, 1939, issue of this periodical is devoted to a symposium of fourteen articles on the subject of "Medical Care." A description of some of the plans now being offered to solve the problem of medical care is given. The legal and ethical phases involved are discussed in one chapter. Enabling legislation is reviewed. The involved participation of the Federal government is adequately presented. The entire subject has been well presented and much information has been made available.

Tumors of the Skin: By Joseph Jordan Eller, M. D., Attending Dermatologists, City Hospital; Consulting Dermatologist, French Hospital, Broad Street Hospital, New York City. Pp. 607. 403 illustrations. Price \$10.00. Philadelphia: Lea and Febiger, 1939.

The author fully discusses skin neoplasms, benign and malignant, giving full information as to their diagnosis and treatments. Special treatment is accorded plastic repair, irradiation therapy, cutaneous surgery, incisions, closures and skin grafting. The subject is well-handled. The book will be of definite value to dermatologists and radiation therapists.

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